

FIG. 1

BEST AVAILABLE COPY

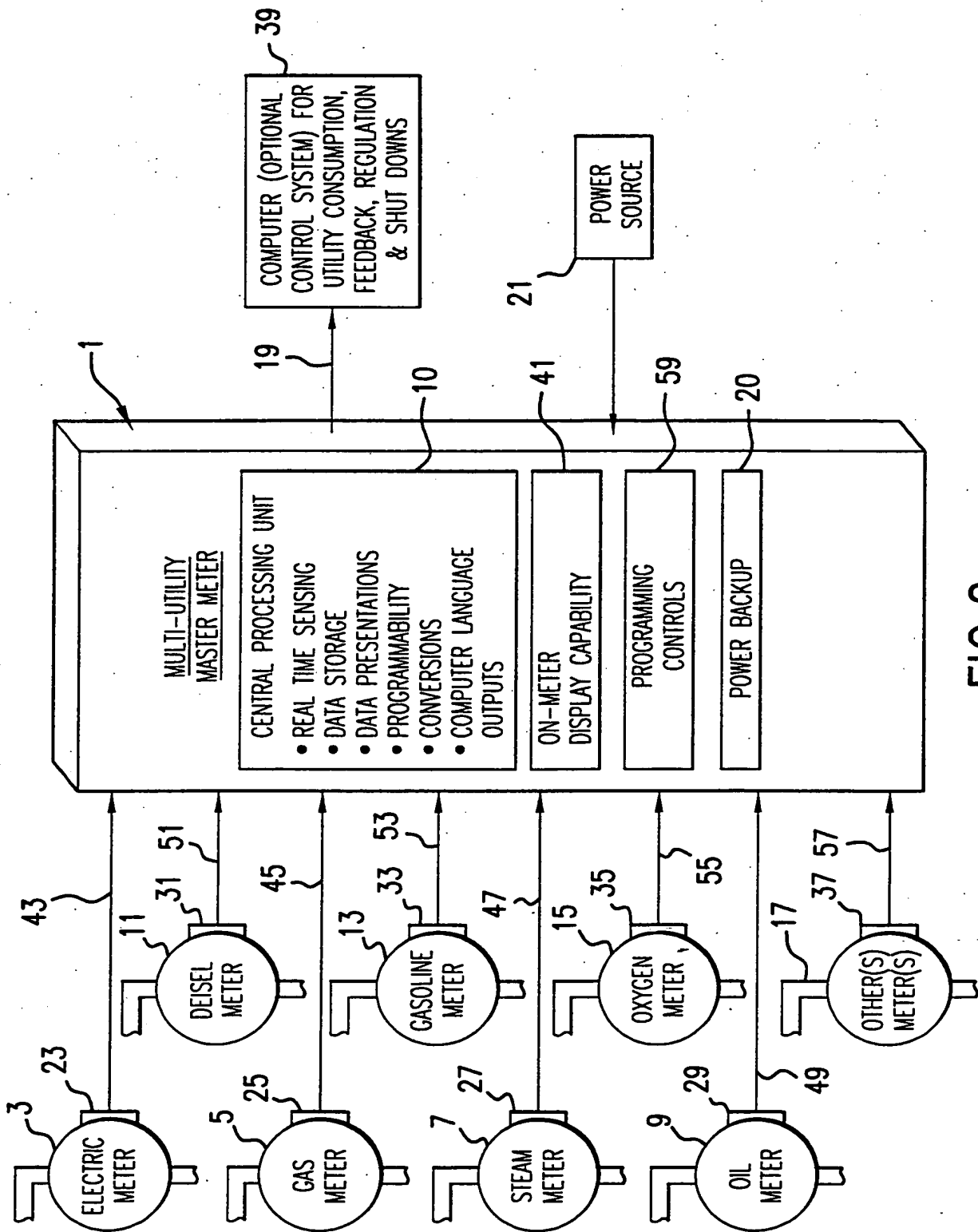


FIG.2

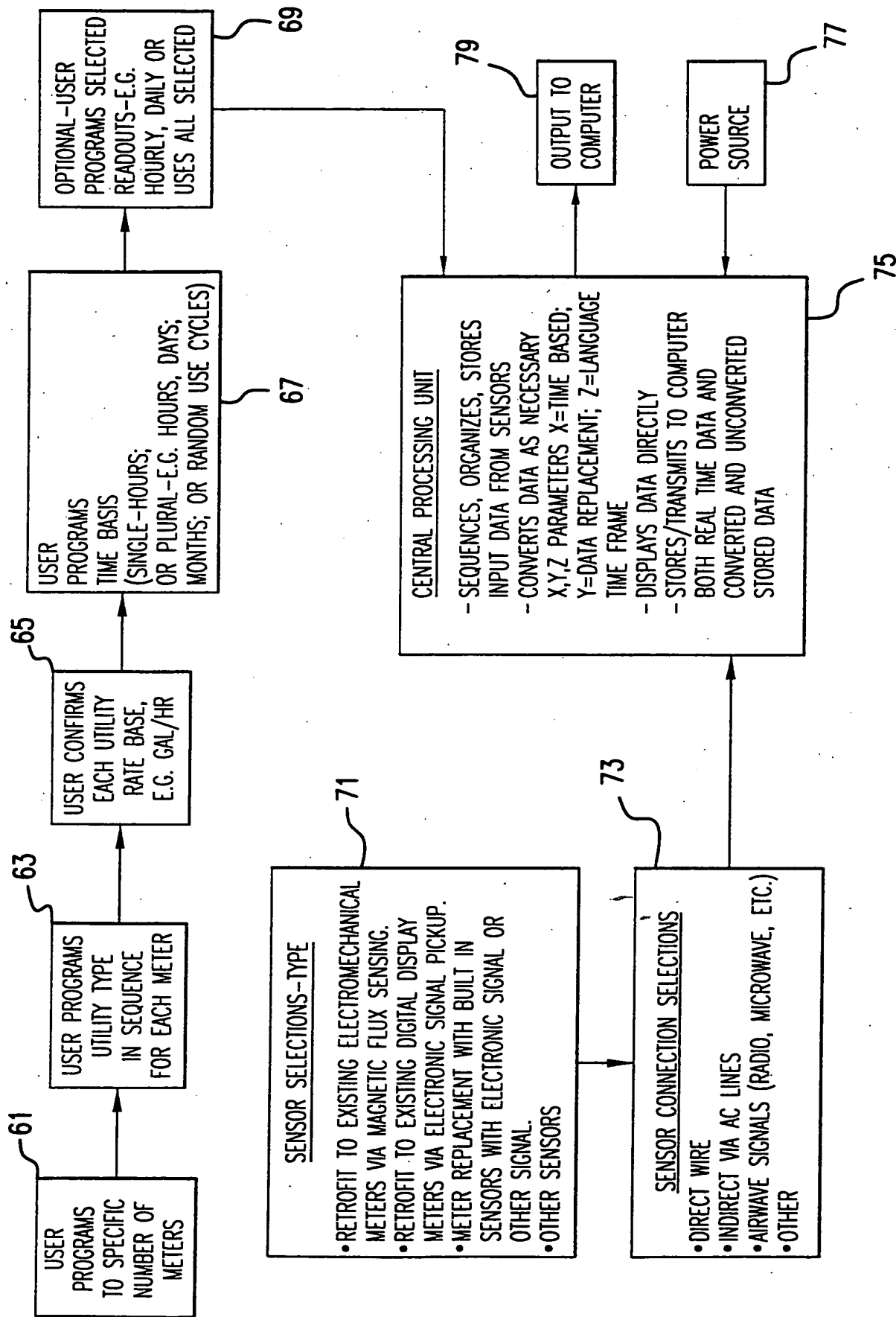


FIG.3

Alarm Response Network

The Limited

Retail Store #0

Location: 0

Power Network

Kw Demand	46	Kw	4362	RESPOND
-----------	----	----	------	---------

Demand Interval	12	RESPOND
-----------------	----	---------

Demand Setpoint	64 Kw	RESPOND
-----------------	-------	---------

ALARM

HVAC Network

Outdoor Temp	72	Humid	30%	RESPOND
--------------	----	-------	-----	---------

Return Air Temp	68	Humid	30%	RESPOND
-----------------	----	-------	-----	---------

Head Pressure	71	RESPOND
---------------	----	---------

Discharge Air Temp	68	RESPOND
--------------------	----	---------

Suction Pressure	psi	RESPOND
------------------	-----	---------

Fan Run	ON	Motor	ON	RESPOND
---------	----	-------	----	---------

Space Temp	72	RESPOND
------------	----	---------

Power To Unit	ON	RESPOND
---------------	----	---------

ALARM

Energy Procurement Network

ELECTRIC

OIL

GAS

WATER

STEAM

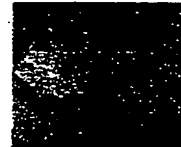
Facilities Network

Occupancy

Operational Efficiency

HVAC Efficiency

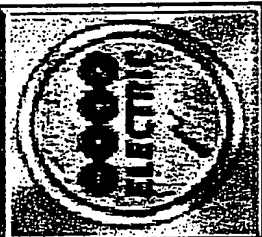
Fire and Safety



1-19 or 4

Real Time Electric Consumption and Energy Cost Analysis For Distribution

Center #0



Provider: 0

Price per Kwh = 0

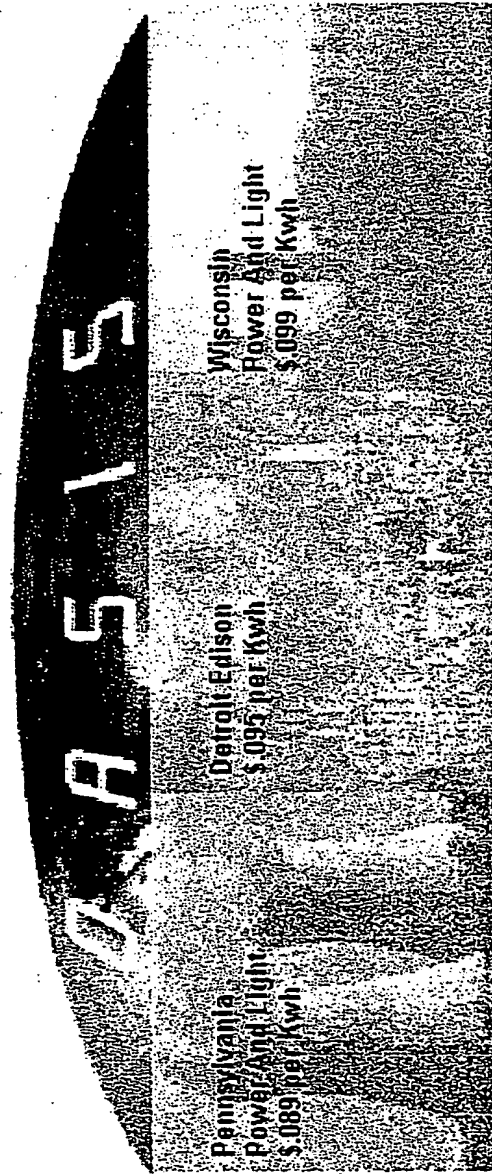
Total Consumption Today

\$44.55 for 469 Kw

Price Off Peak Kwh = .07 cents...\$275

Price On Peak Kwh = .09 cents...\$575

Demand Penalty = \$100.00



Pennsylvania
Power And Light
\$.089 per Kwh

Detroit Edison
\$.095 per Kwh

Wisconsin
Power And Light
\$.099 per Kwh

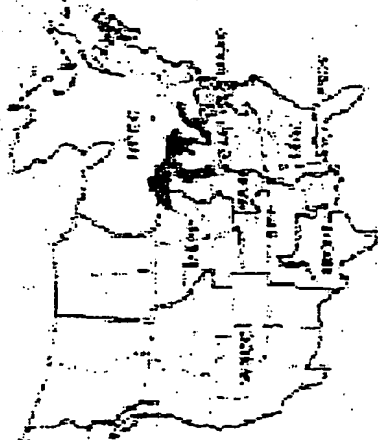
2/15/1

Figure 5

OASIS Nodes in VIAC

Node: SISTO Med

<http://axis.psu.edu>



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200

1962

Figure 6

Occupancy

RETURN

OUTSIDE INFORMATION

Of People Who Passed The Front Door/Gate

236

Approximate Time That These People Walked By

8:00 AM to 10:00 AM	24	3:30 PM to 5:00 PM	144
10:30 AM to 1:00 PM	14	5:00 PM to 7:30 PM	26
1:00 PM to 3:30 PM	56	7:30 PM to 11:00 PM	178

INSIDE INFORMATION

Of People Who Entered The Front Door/Gate

Section A 24 Section D 116
Section B 34 Section E 22
Section C 87 Section F 37

Approximate Time That These People Entered

8:00 AM to 10:00 AM	13	3:30 PM to 5:00 PM	29
10:30 AM to 1:00 PM	24	5:00 PM to 7:30 PM	13
1:00 PM to 3:30 PM	16	7:30 PM to 11:00 PM	88

Figure 7

Freehold Central Office

Total Facility Real Time Consumption

6138 Kw

Active Kw	354	Daily Kwh	1963
Last Interval	462	Yesterday Kwh	9804
Daily Peak Kw	592	Monthly Kwh	17635
Monthly Peak Kw	642	Yearly Kwh	380387

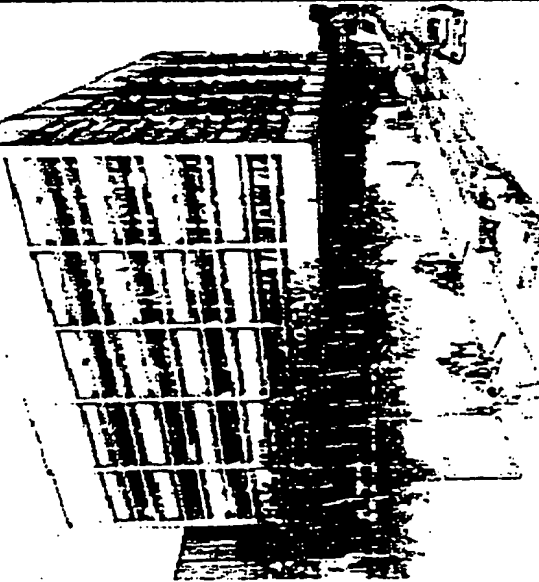
Other Utilities Real Time Consumption

Gas Consumption	614 ccf
Steam Consumption	610 %mlb
Steam Demand	457 MLB
Oil Consumption	108 Gal.
Daily Water Consumption	9607 Gal.

Outdoor Temperature	78 °
Indoor Temperature	72 °
Outdoor Humidity	60 %

FORNITE

Freehold Central Office Floor Selector



- Floor 6
- Floor 5
- Floor 4
- Floor 3
- Floor 2
- Floor 1
- Sublevel 1
- Sublevel 2
- Basement

Floor Plan Selector

RETURN

221
Floor
Services

Figure 8

Freehold Central Office

Total Facility Real Time Consumption

6136 Kw

Active Kw	352	Daily Kwh	4961
Last Interval	460	Yesterday Kwh	3802
Daily Peak Kw	590	Monthly Kwh	17633
Monthly Peak	640	Yearly Kwh	580385

Other Utilities Real Time Consumption

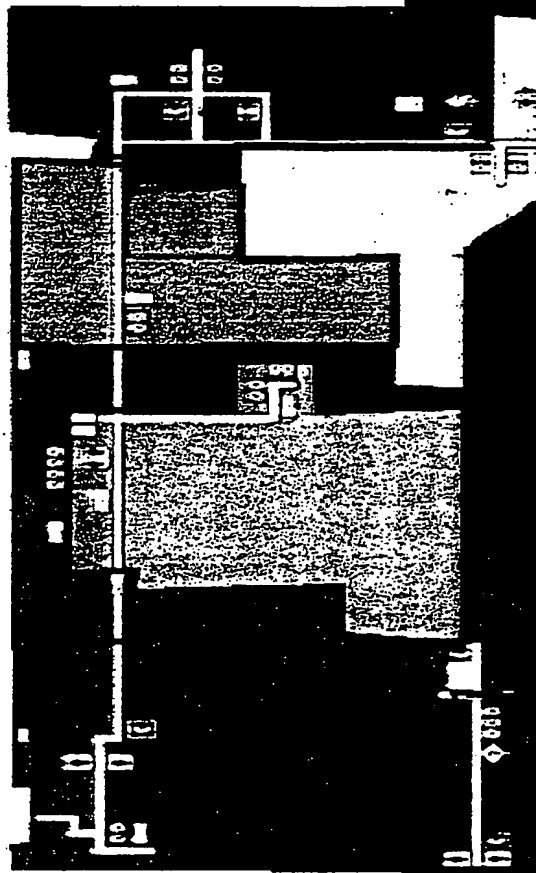
Gas Consumption	612	ccf
Steam Consumption	608	%mlb
Steam Demand	455	MLB
Oil Consumption	106	Gal.
Daily Water Consumption	9685	Gal.

Outdoor Temperature	75	°
Indoor Temperature	72	°
Outdoor Humidity	60	%

ONNET

Freehold Central Office

Hall Selector Fourth Floor



Click Here To Select Florence Hall

Figure 9

Freehold Central Office

Total Facility Real Time Consumption

6139 Kw

Active Kw	355	Daily Kwh	4964
Last Interval	463	Yesterday Kwh	9805
Daily Peak Kw	593	Monthly Kwh	17636
Monthly Peak	643	Yearly Kwh	580388

Other Utilities Real Time Consumption

Gas Consumption	915	ccf
Steam Consumption	511	%mlb
Steam Demand	458	MLB
Oil Consumption	109	Gal.
Daily Water Consumption	9688	Gal.

Outdoor Temperature	79	°
Indoor Temperature	72	°
Outdoor Humidity	60	%

ONNET

Freehold Central

Room Selector For Lothar Hall Fourth Floor

Stairs

Pat. enl Room # 401	Pat. enl Room # 403	Pat. enl Room # 405	Elevators	Pat. enl Room # 407	Pat. enl Room # 409	Pat. enl Room # 411
Side A			Nurse's Station	Side B		
Pat. enl Room # 402	Pat. enl Room # 404	Pat. enl Room # 406		Pat. enl Room # 408	Pat. enl Room # 410	Pat. enl Room # 412
Pat. enl Room # 413	Pat. enl Room # 415	Pat. enl Room # 417	Elevators	Pat. enl Room # 419	Pat. enl Room # 421	Pat. enl Room # 423
Side A			Nurse's Station	Side B		
Pat. enl Room # 414	Pat. enl Room # 416	Pat. enl Room # 418	Nurse's Lockroom	Pat. enl Room # 420	Pat. enl Room # 422	Pat. enl Room # 424

RETURN

Figure 10

00115-118A

Freehold Central Office

Total Facility Real Time Consumption

6133 Kw

Active Kw	354	Daily Kwh	1963
Last Interval	462	Yesterday Kwh	3804
Daily Peak Kw	592	Monthly Kwh	17635
Monthly Peak	642	Yearly Kwh	380387

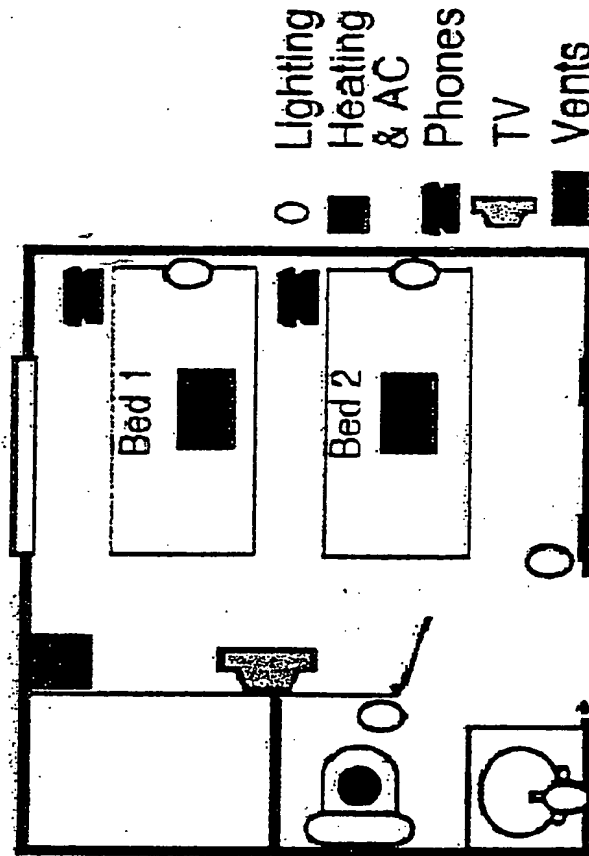
Other Utilities Real Time Consumption

Gas Consumption	ccf	574
Steam Consumption	%mlb	610
Steam Demand	MLB	457
Oil Consumption	Gal.	108
Daily Water Consumption	Gal.	9687

Outdoor Temperature	°	78
Indoor Temperature	°	72
Outdoor Humidity	%	60

ONNET

Room 401



RETURN

251

Actual
Room
SERVICES
for

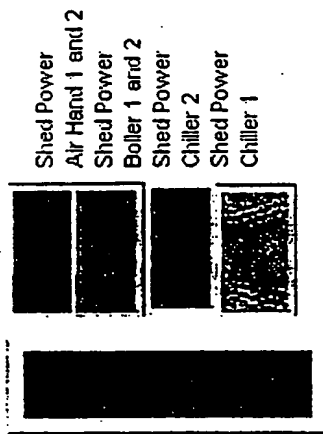
Figure 11

11-2711
Figure 12

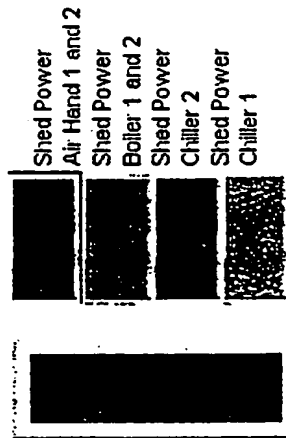
Electric Adaptive
Demand Center



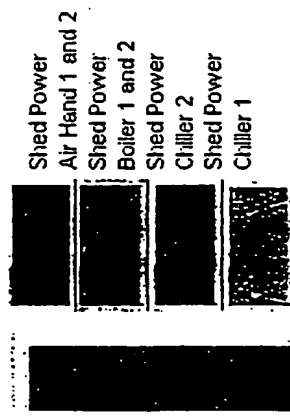
HVAC Load #2



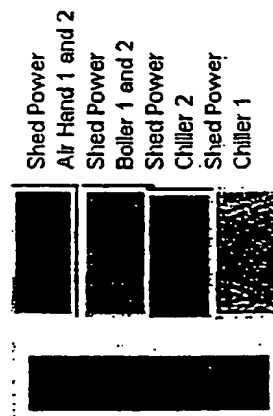
HVAC Load #4



HVAC Load #1



HVAC Load #3



2871

HVAC Efficiency

RETURN

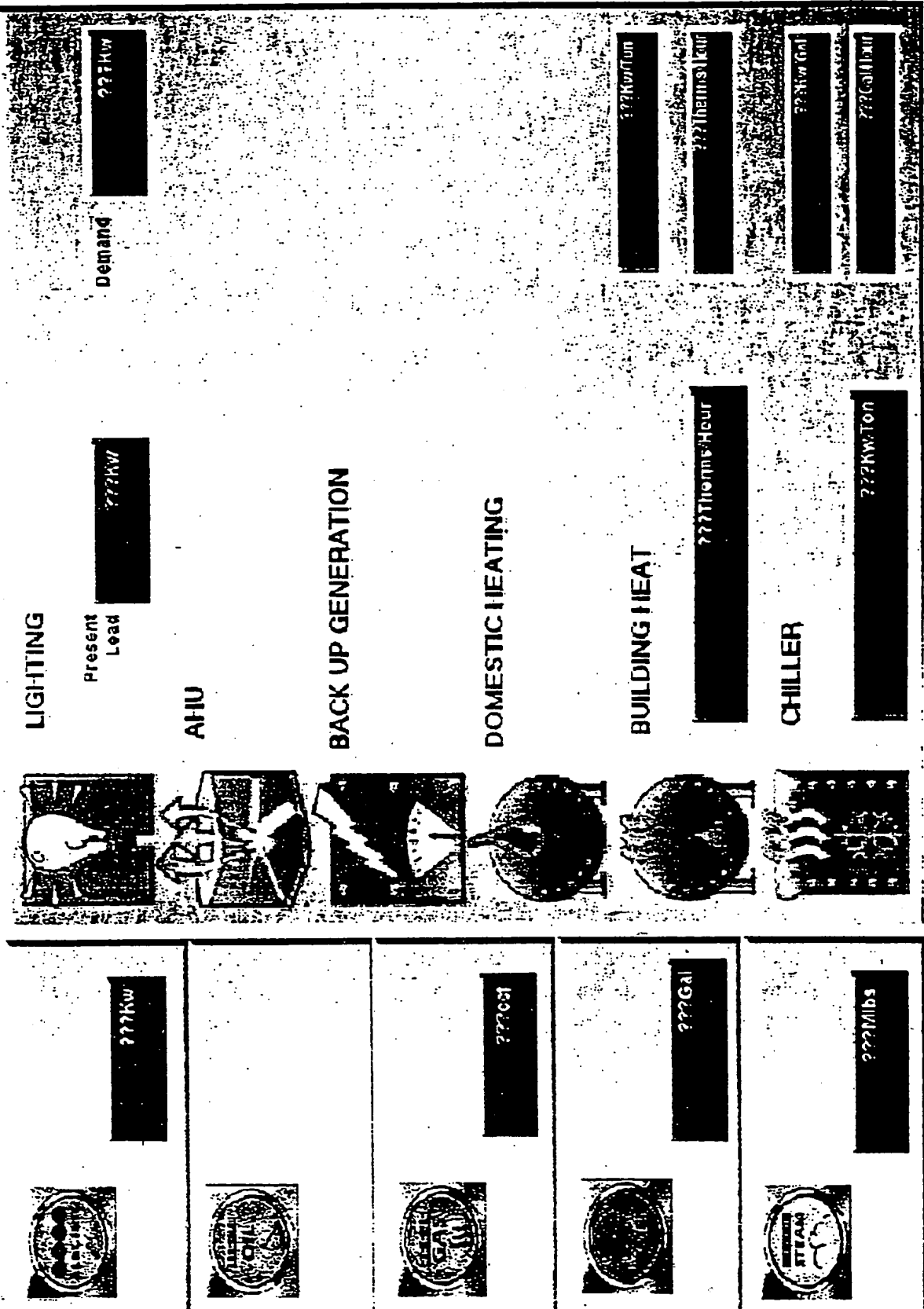


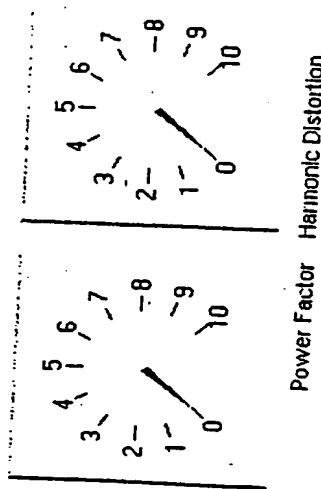
Figure 13

Power Quality Control For 0

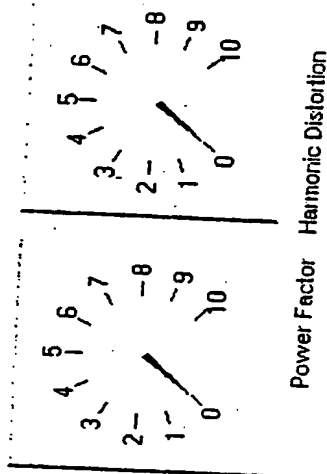
003210

003210

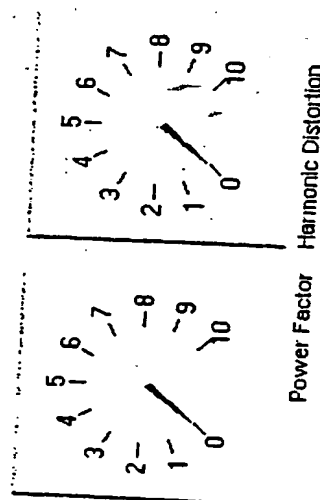
HVAC Load #1



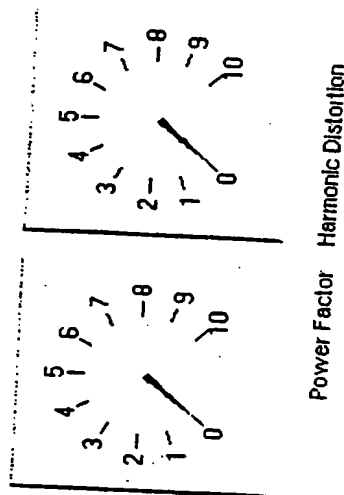
HVAC Load #2



HVAC Load #3



HVAC Load #4



311

Figure 14



Indoor Air Quality

RETURN

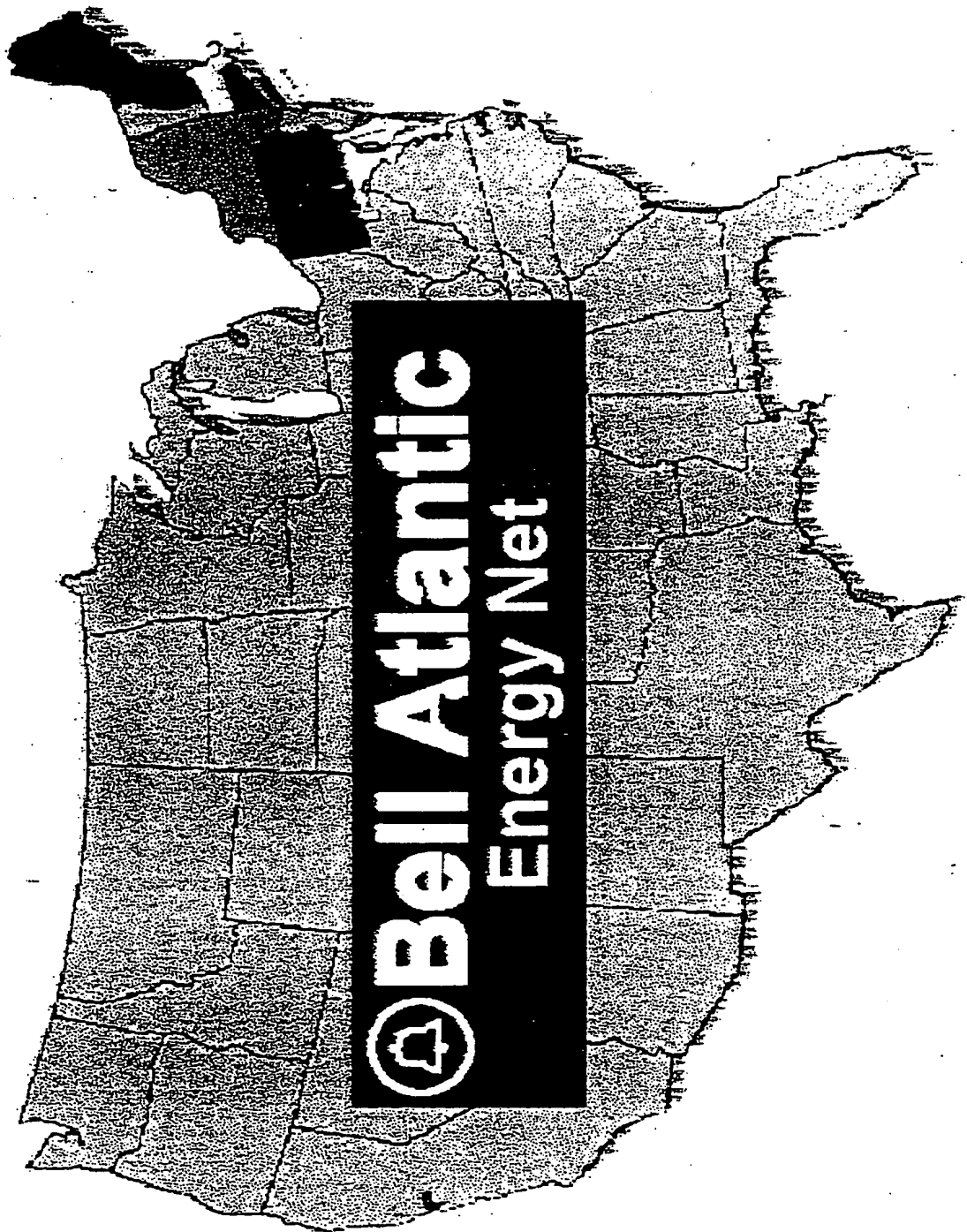
Acceptable

Level Detected

SO ₂ - Sulfur Dioxide =	0.2 ppm	0.14 ppm
H ₂ S	0 ppm	0.14 ppm
CO - Carbon Dioxide	1500 ppm	1000 ppm
CO - Carbon Monoxide	1 ppm	2.5 ppm
NO - Nitrous Oxide	37.2 ppm	0.4 ppm
NO ₂ - Nitrogen Dioxide	0.7 ppm	0.3 ppm
VOCs - Volatile Organic Compounds	High	Medium
RH - Relative Humidity	44% - 58.4%	
Temp -		

Figure 16

331



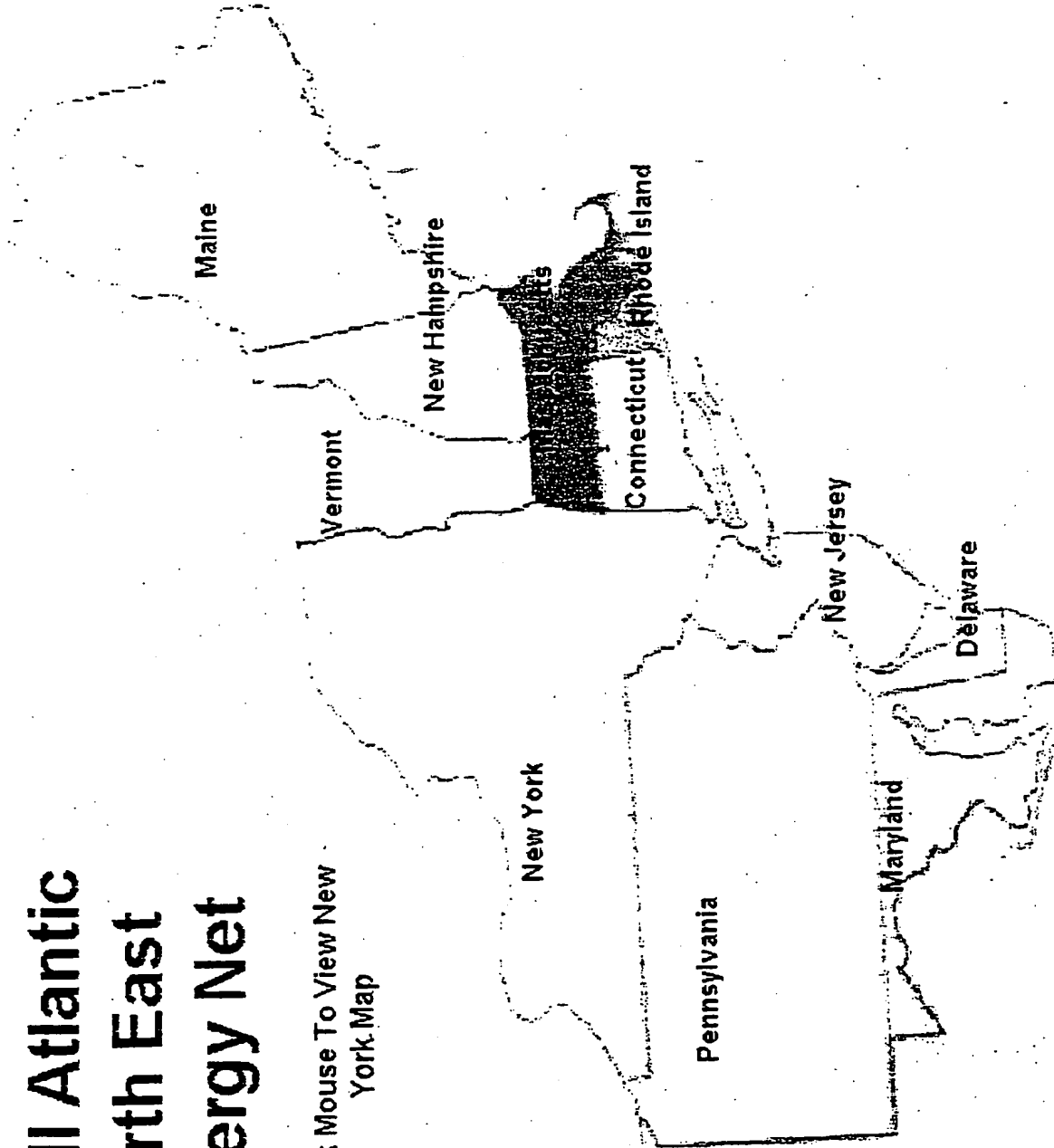
LOCATION
OF
MULTISITE
LOCATION

~361

Figure ~~10~~ 17

Bell Atlantic North East Energy Net

Click Mouse To View New
York Map



LOCATION
MAPS

~371

Figure 18

PWB-118A

LOCATION
MAP.

2381

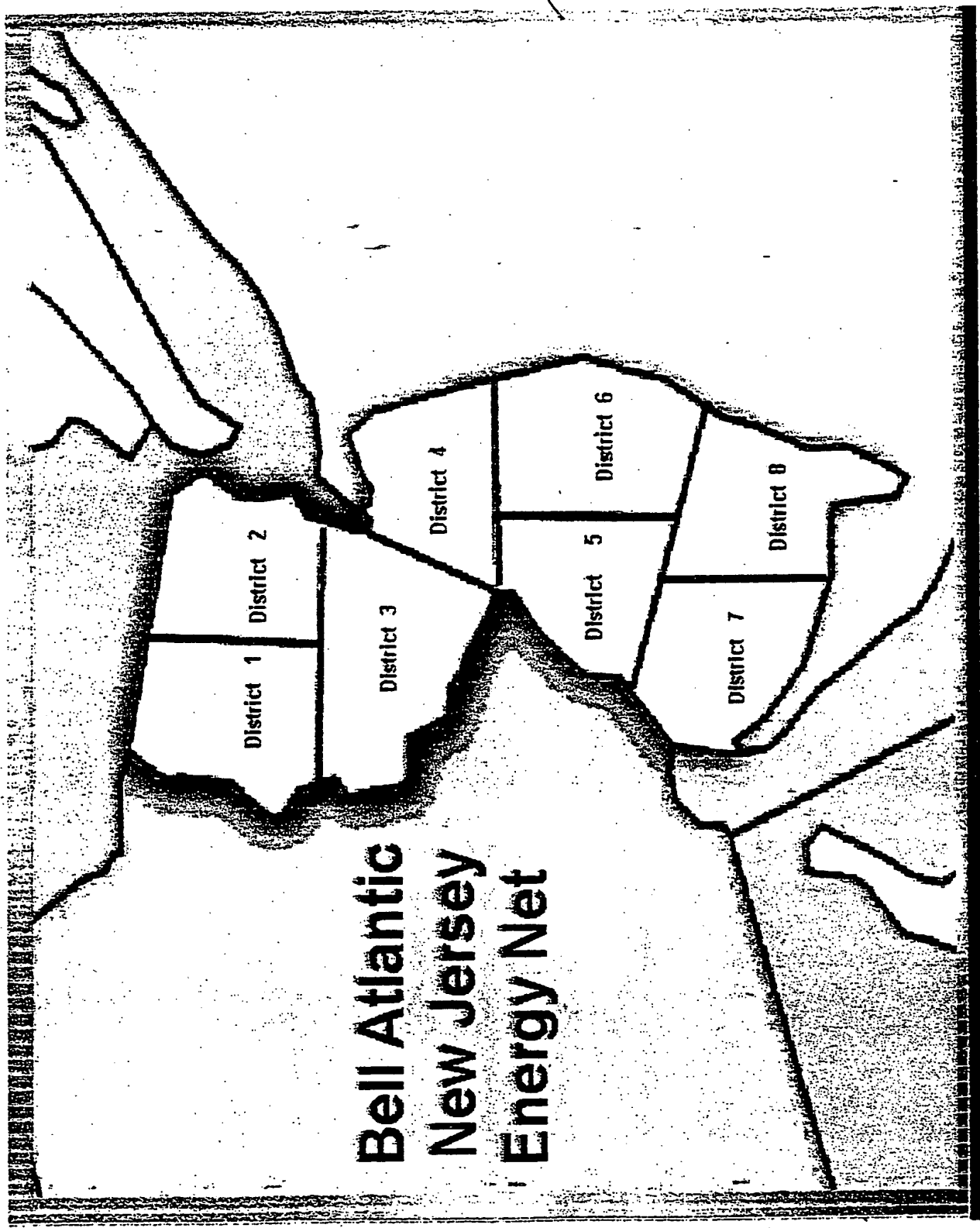
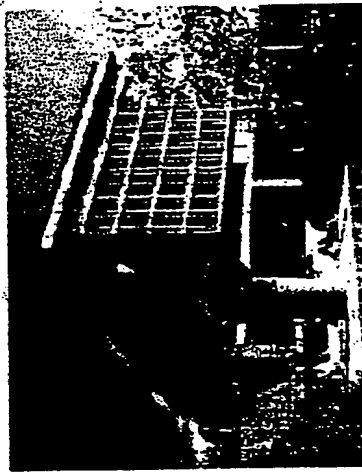


Figure 19

New Jersey Energy Net District 4

Perth Amboy
 Kearsy
 Sayresville
 Griggstown
 Deans
 Plainsboro
 Lincoln
 Freehold
 Adelphia
 Clarksburg
 Roosevelt
 Yardville
 Trenton
 Pennington
 Princeton
 Hopewell
 Flemington
 Somerville
 Point Pleasant
 New Brunswick



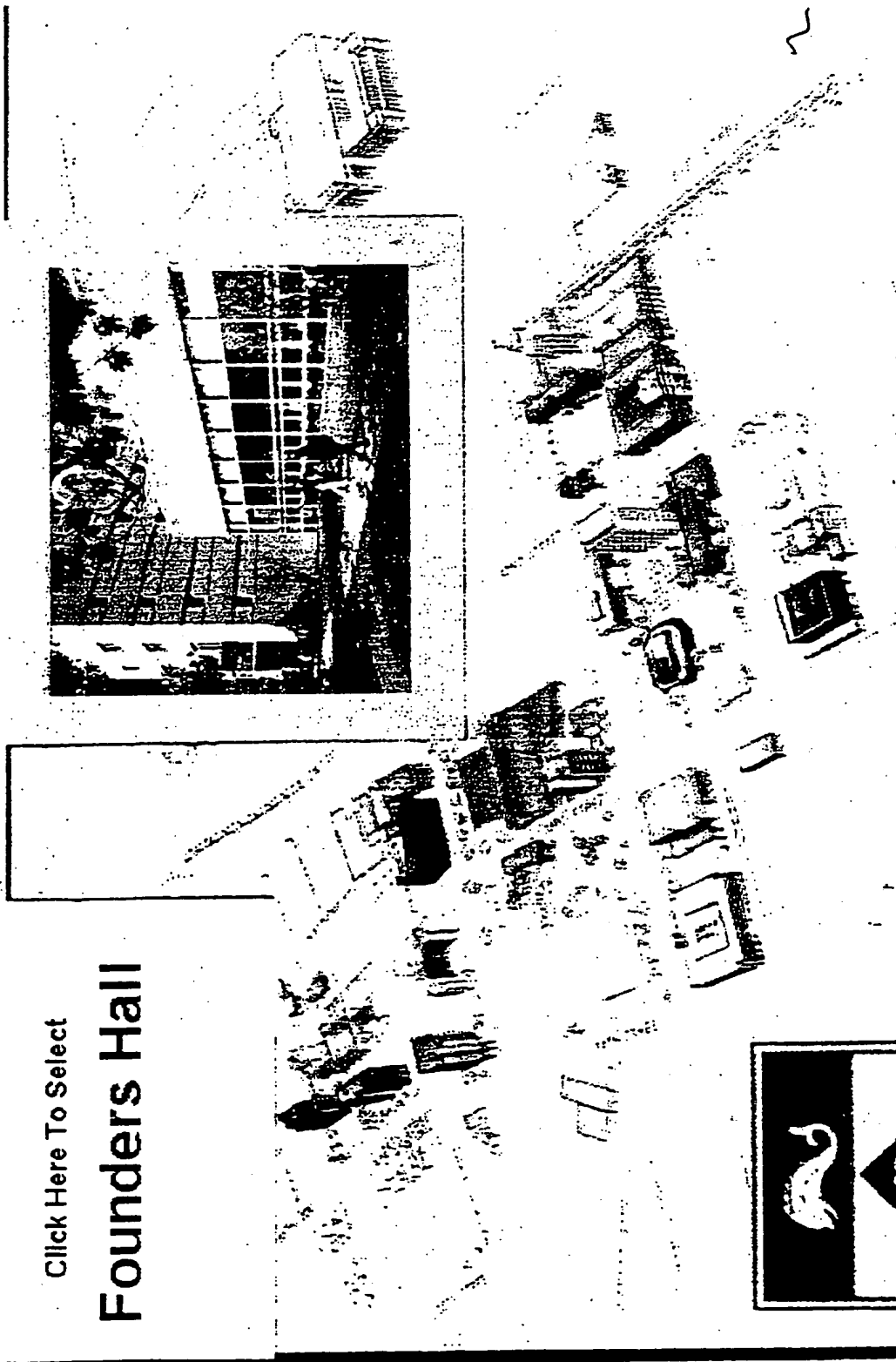
LOCATION
 MAP
 BUILDING
 SITE

~351

Figure 20

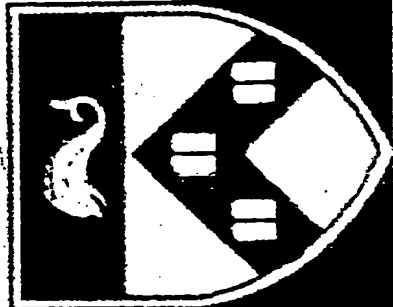
Click Here To Select

Founders Hall



Location
of
Building
for
Campus,
University
&
Hospital
Location

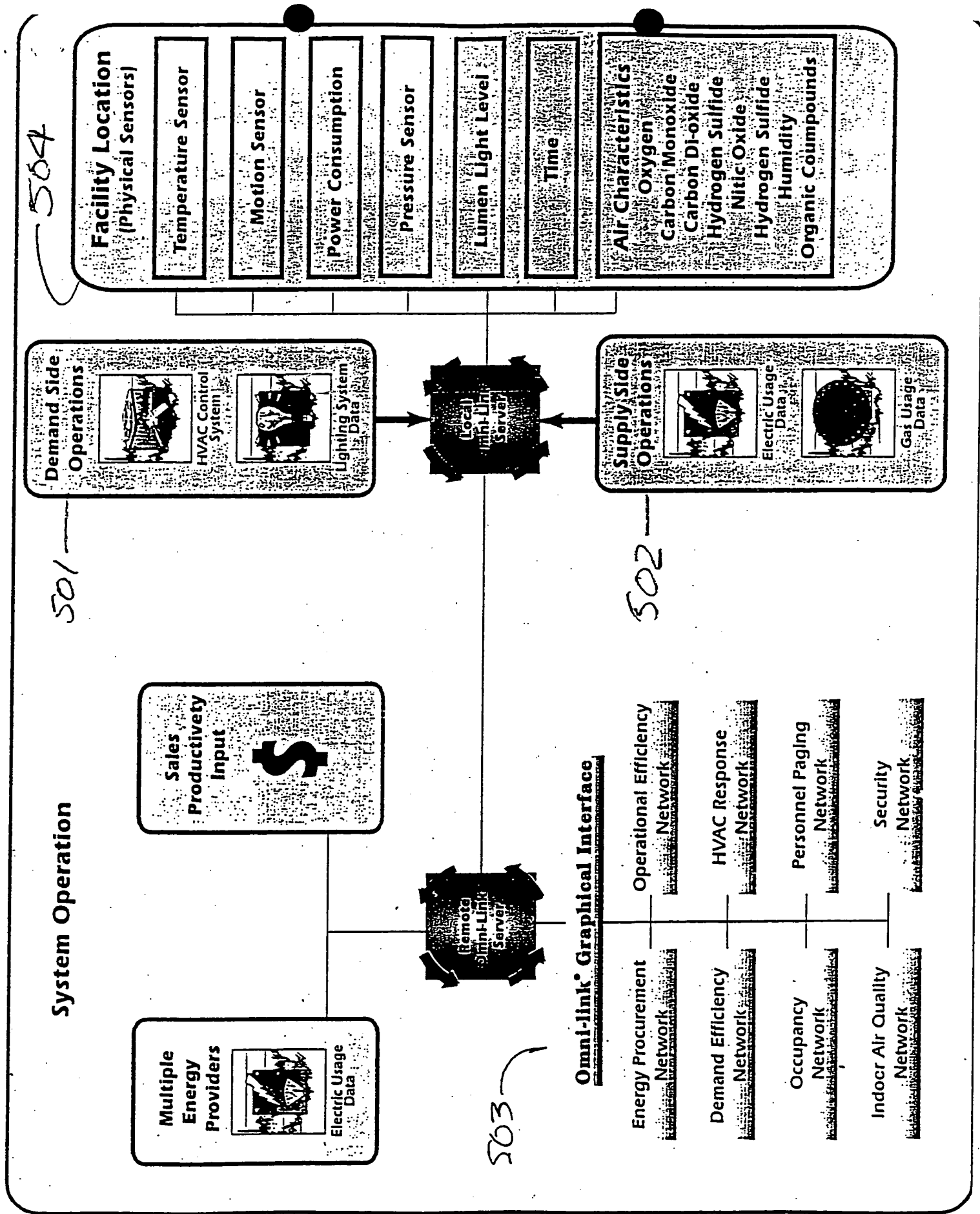
~401



Saint Patrick's Health Complex

Figure 21

FIGURE 22





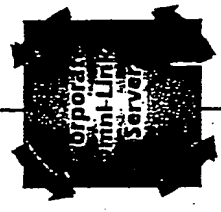
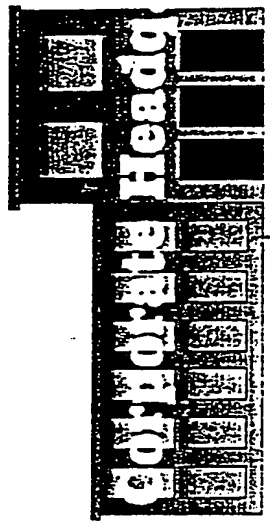
Demand Efficiency Network

Net Benefits:

- Centralized demand control
- Localized demand control
- Utility procurement demand control
- Corporate demand profiling
- Pinpoint problem areas

Net Savings:

- Conservatively a 3 - 10% reduction in electrical demand



HVAC Unit Control

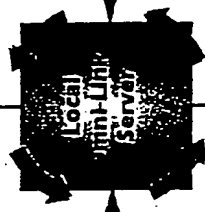
Stage 1 Cooling

Stage 2 Cooling

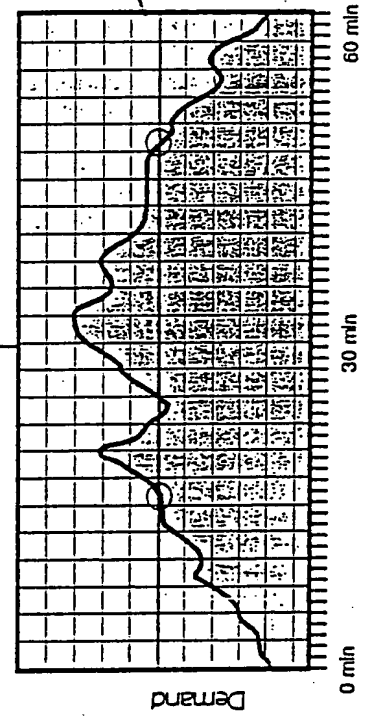
Stage 1 Heating

Stage 2 Heating

Electrical Utility Meter



Utility Meter Cycle



Facility Locations

Location #1

Location #2

Location #3

Location #4

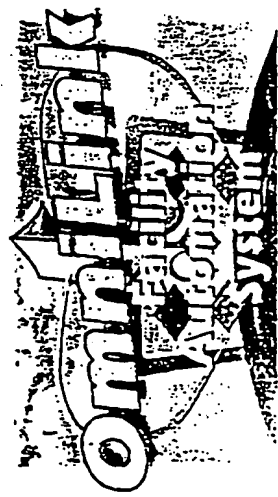
Location #5

Location #6

Location #7

Location #8

FIGURE 24



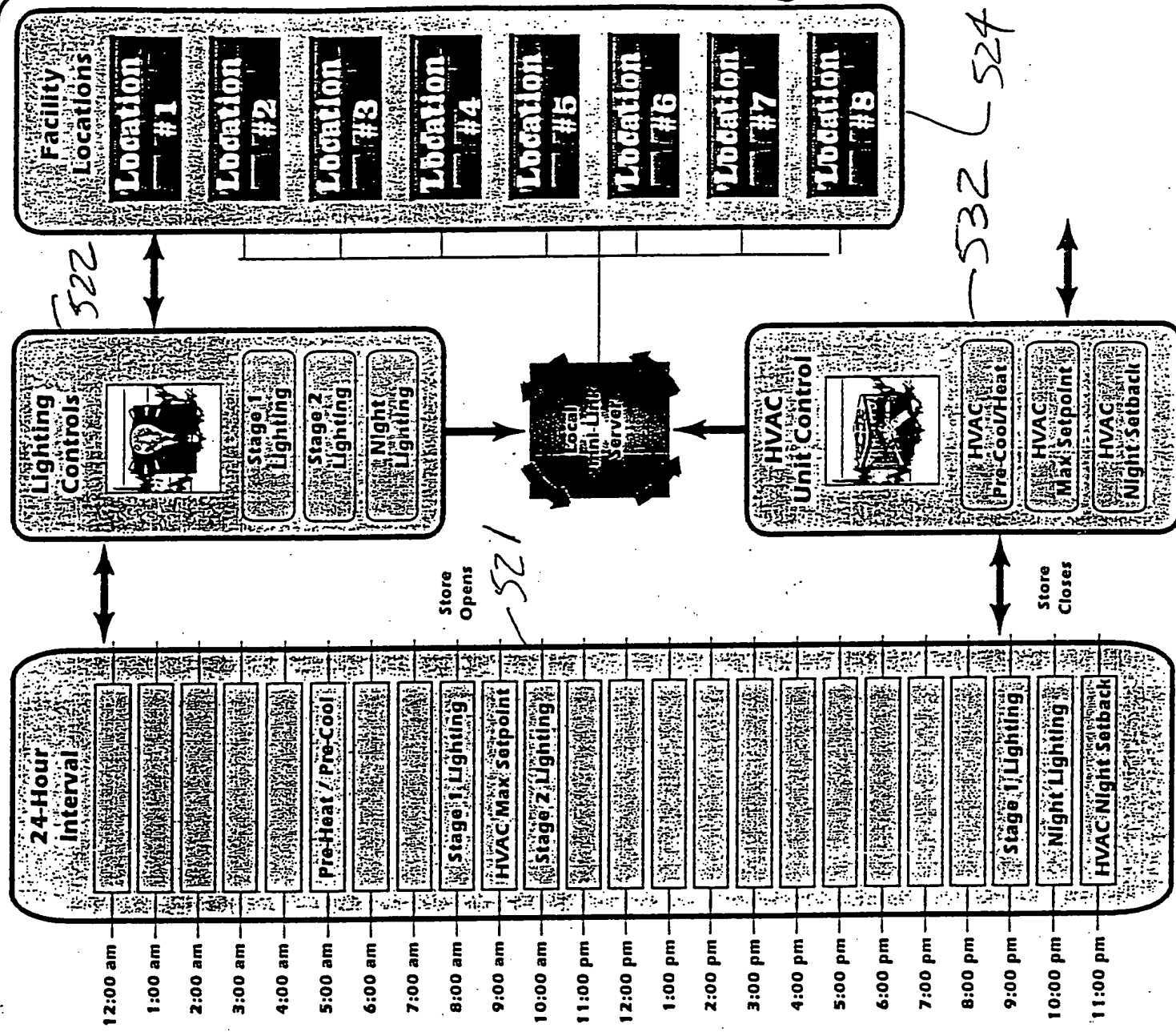
Operational Efficiency Network

Net Benefits:

- Nationwide Simultaneous Operational Control
- Efficient Operations of HVAC & Lighting
- Timelock efficiency without Human Intervention
- Automatic Space Pre-Heat / Pre-Cool
- Automatic Multi-Stage Lighting

Net Savings:

- Conservatively 5 - 15% Reduction in Energy Consumption





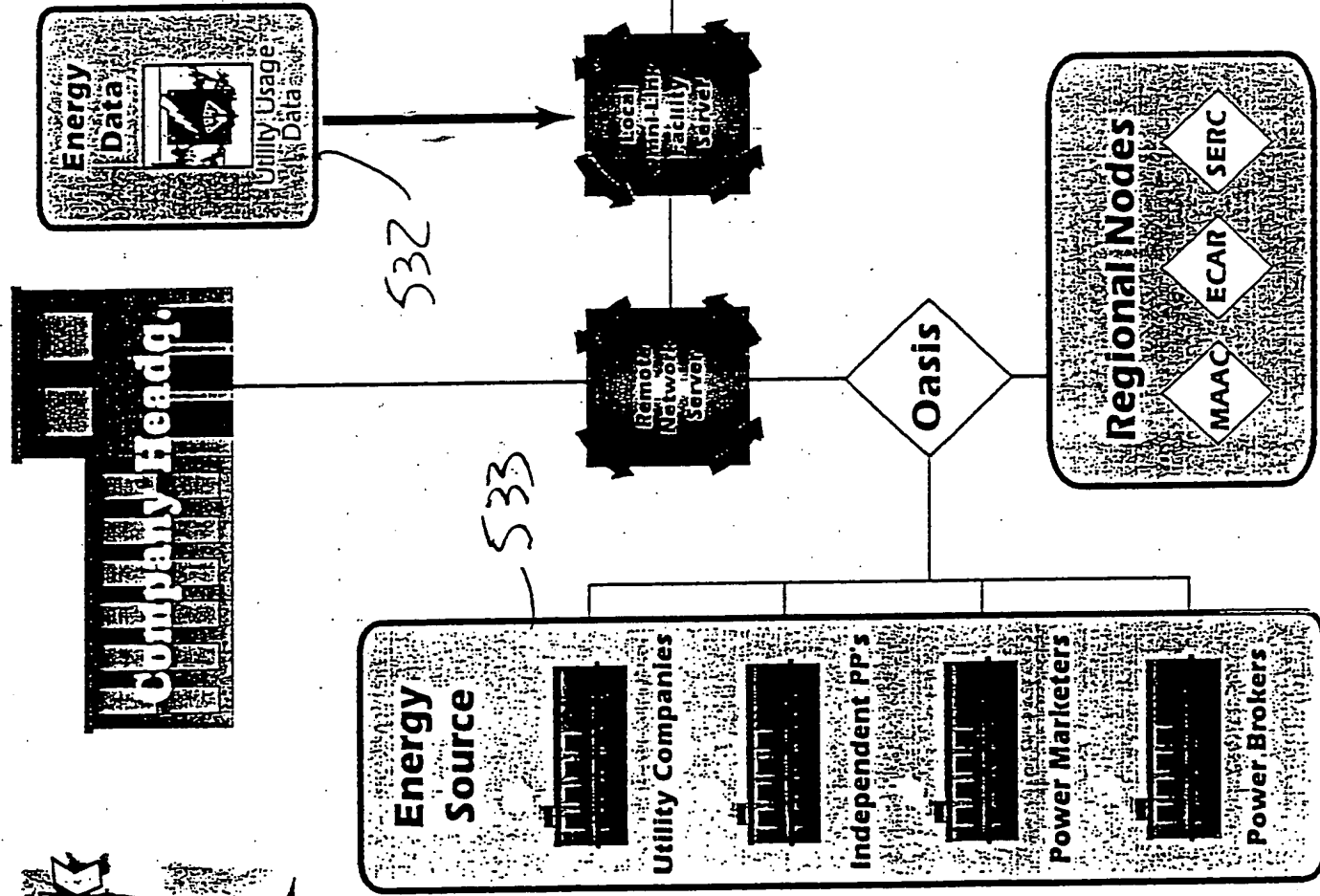
Energy Procurement Network

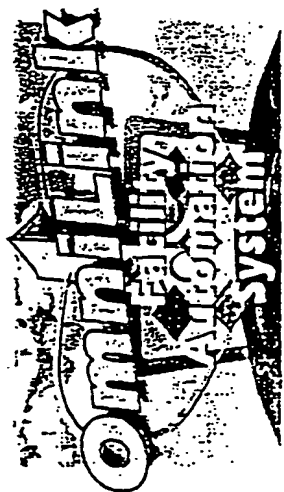
Net Benefits:

- Centralized Procurement Network
- Low cost electricity
- Instant consolidation
- Instant aggregation
- Grid purchase / no middleman

Net Savings:

- Approximately 10% less than the deregulated price
- Approximate savings 2 to 5 mills





Occupancy Network

Personnel Paging Network

Net Benefits:

- Instant store occupancy information
- Instant mall occupancy information
- Instant traffic direction
- Staff requirements / statistical analysis

Net Savings:

- Labor operational control
- Statistical sales analysis
- Coordination link with demand module

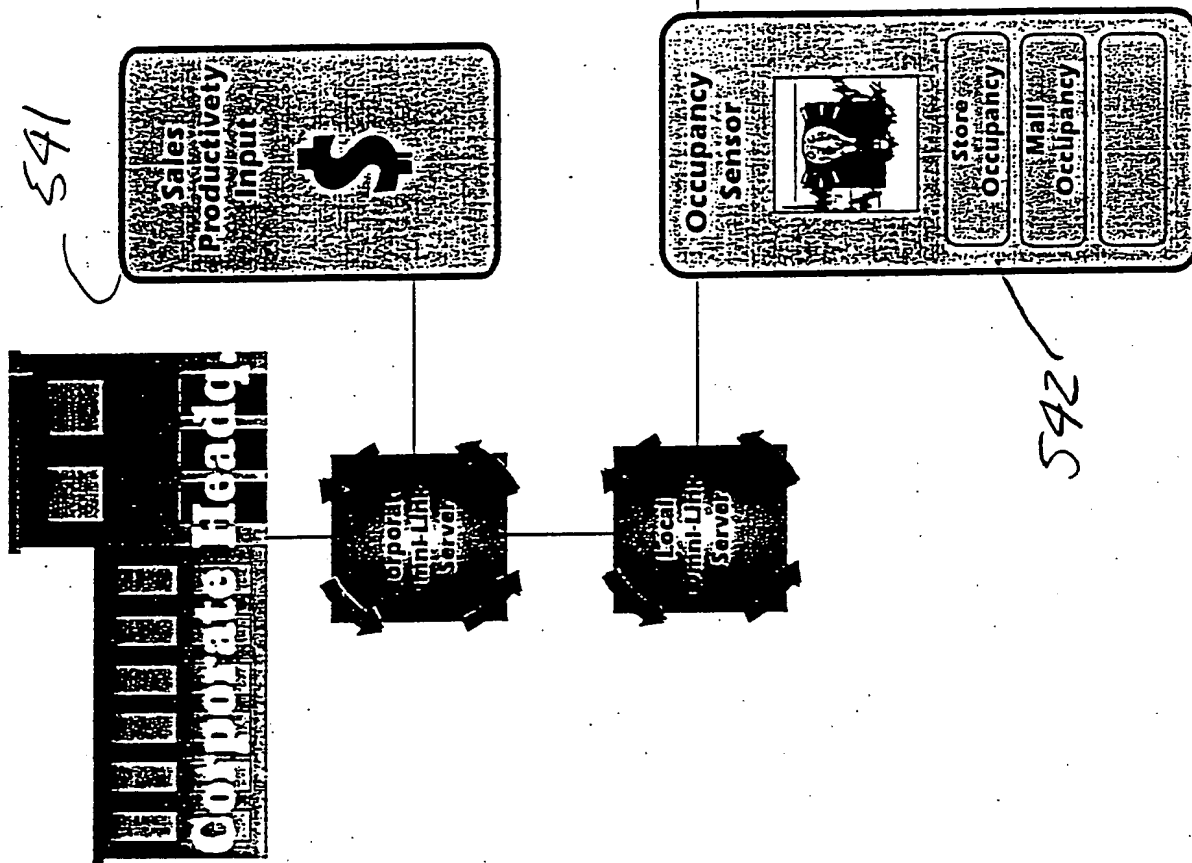


FIGURE 27



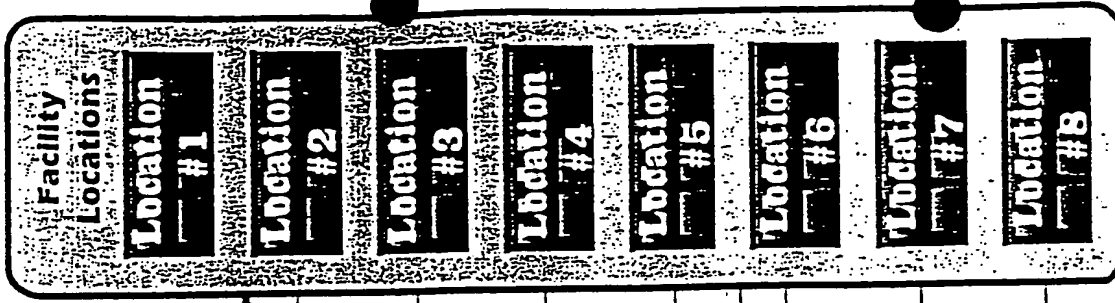
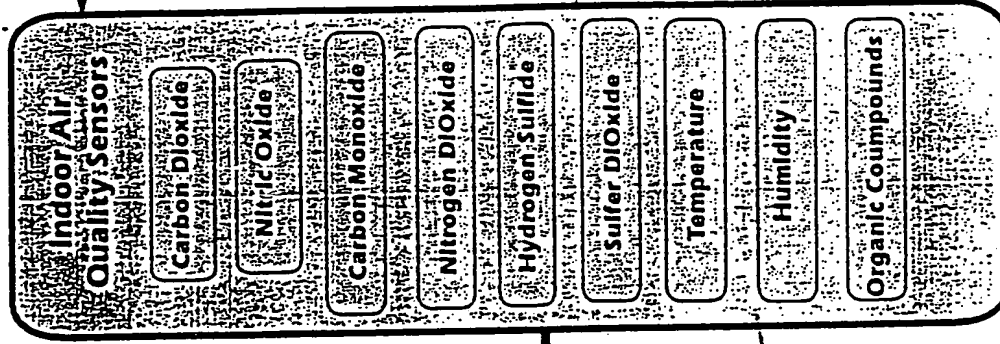
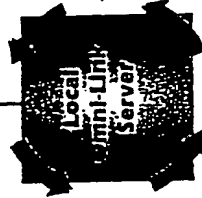
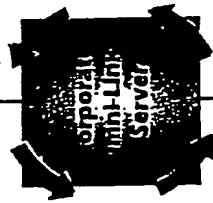
Indoor Air Quality Network

Net Benefits:

- Instant health information for employees

Net Savings:

- Less Sick Employees
- Less claims for poor air



SS1

SS2



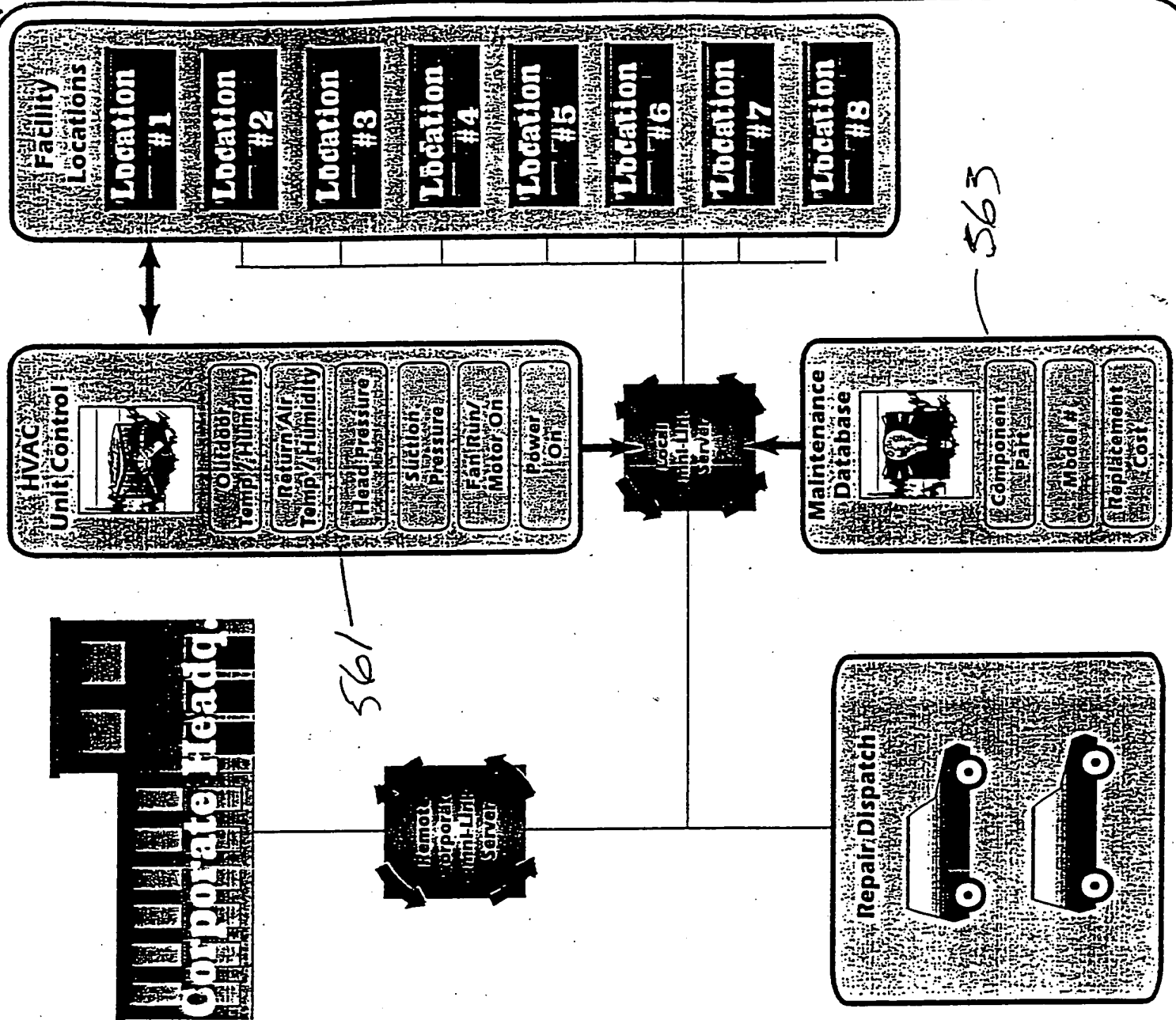
HVAC Response Network

Net Benefits:

- Centralized processing for all HVAC service
- Low-priced proactive repair rather than costly reactive service (40%)
- Cost-effective dispatch identifying component malfunction
- Alleviation of false dispatches (30%)
- Track repair cost, repair time, contractor performance, repeated billings
- Embedded program / contractor training

Net Savings:

- Approximately 80% reduction in false dispatch calls
- Approximately 80% reduction in overtime weekend repairs
- Conservatively a 5 - 15% reduction in



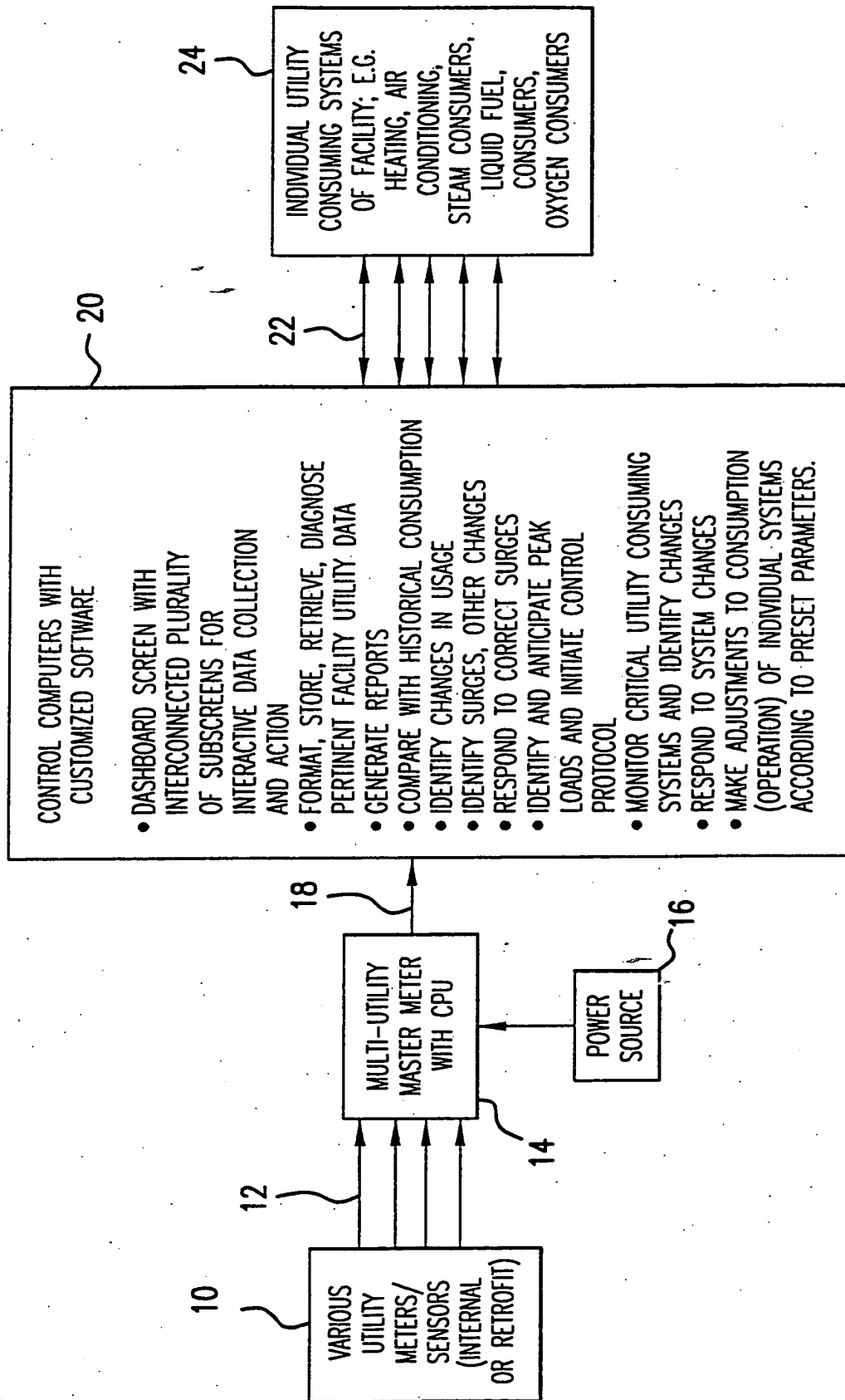


FIG.1

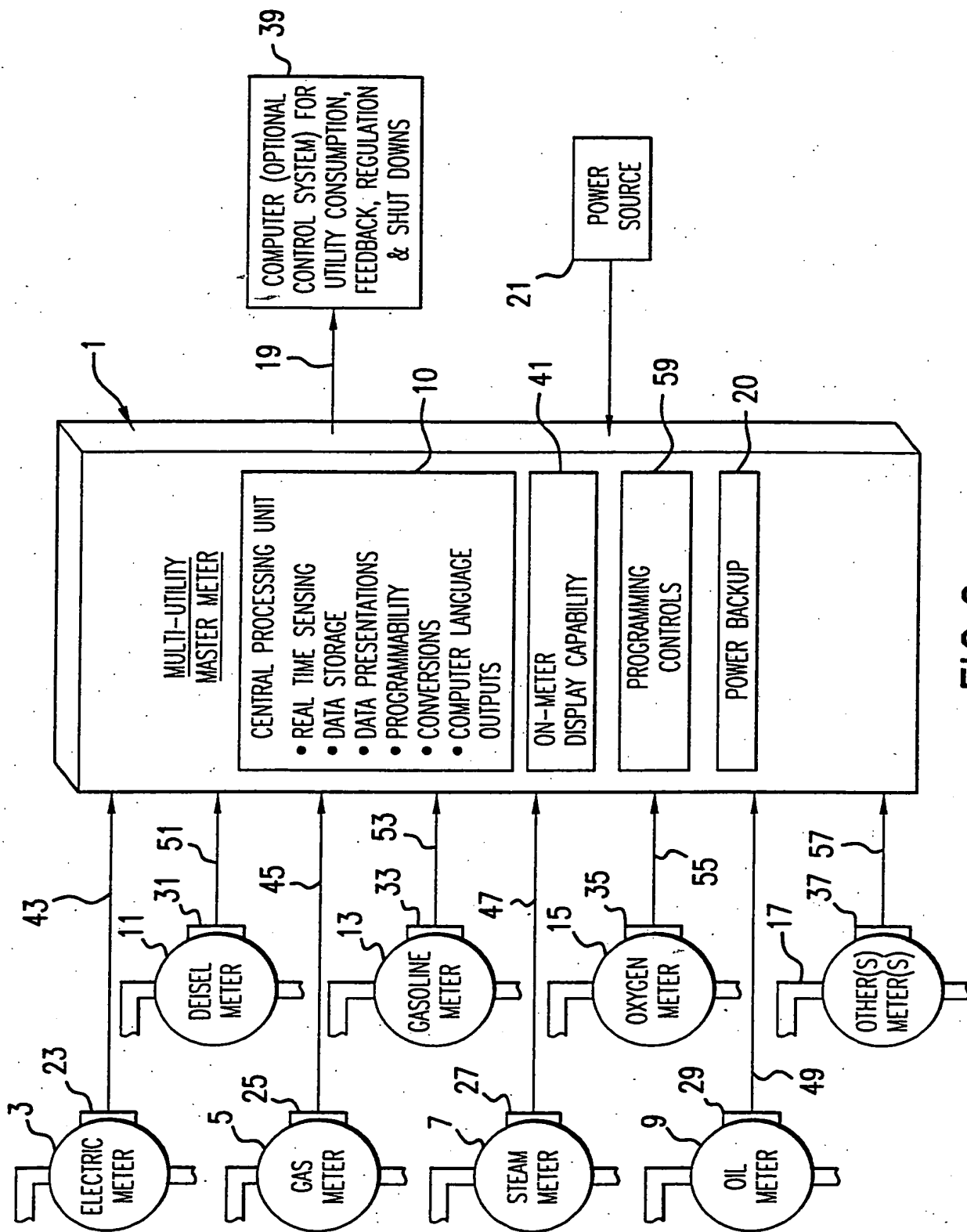


FIG.2

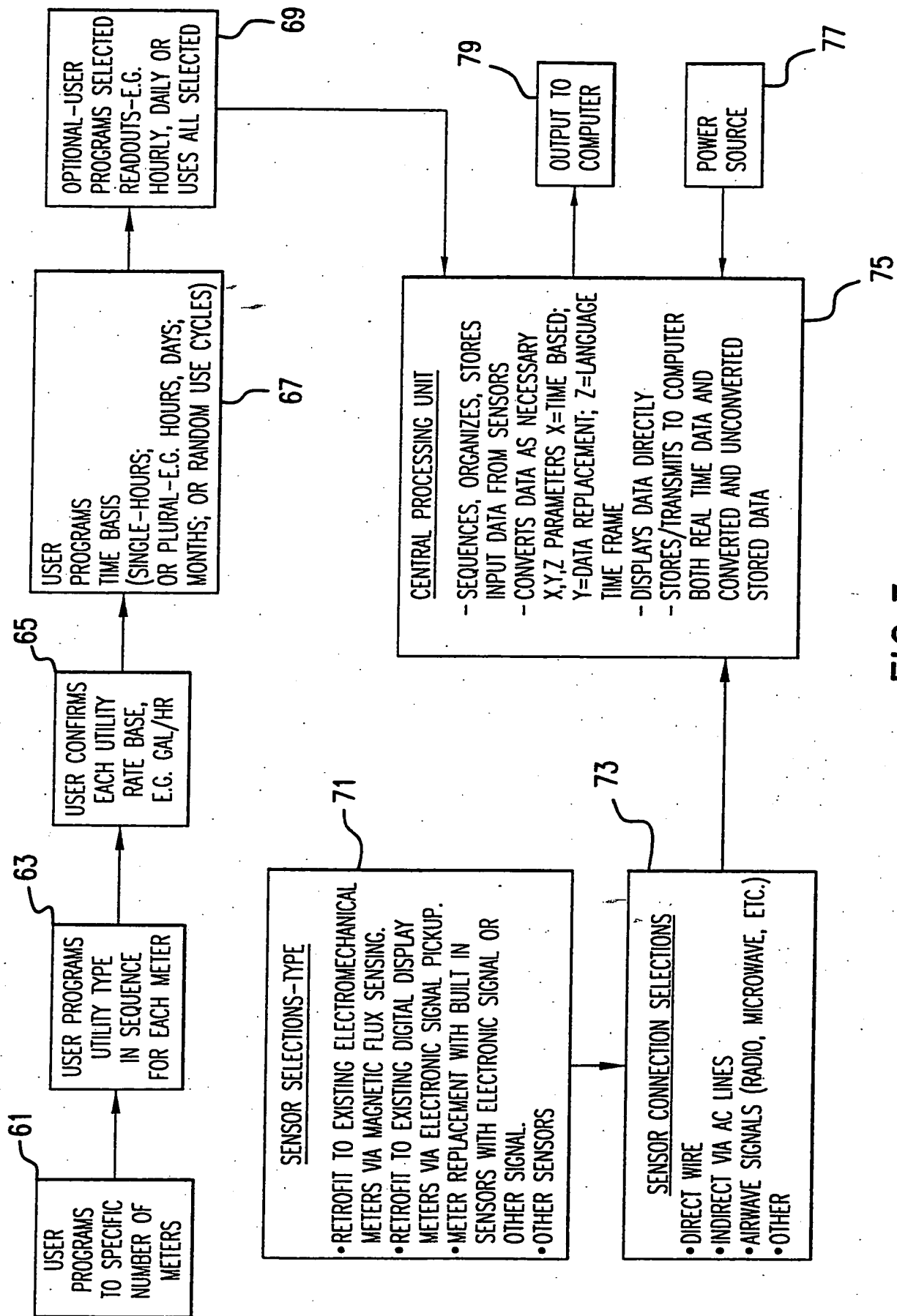


FIG.3

Alarm Response Network

The Limited

Retail Store #0

Location: 0

Power Network

Kw Demand	48	Kw	4362	RESPOND
Demand Interval	12			RESPOND
Demand Setpoint	64 Kw			RESPOND

ALARM

HVAC Network

Outdoor Temp	72	Humid	30%	RESPOND
Return Air Temp	68	Humid	30%	RESPOND
Head Pressure	71			RESPOND
Discharge Air Temp	68			RESPOND
Suction Pressure	psi			RESPOND
Fan Run	ON	Motor	ON	RESPOND
Space Temp	72			RESPOND
Power To Unit	ON			RESPOND

ALARM

Energy Procurement Network

ELECTRIC

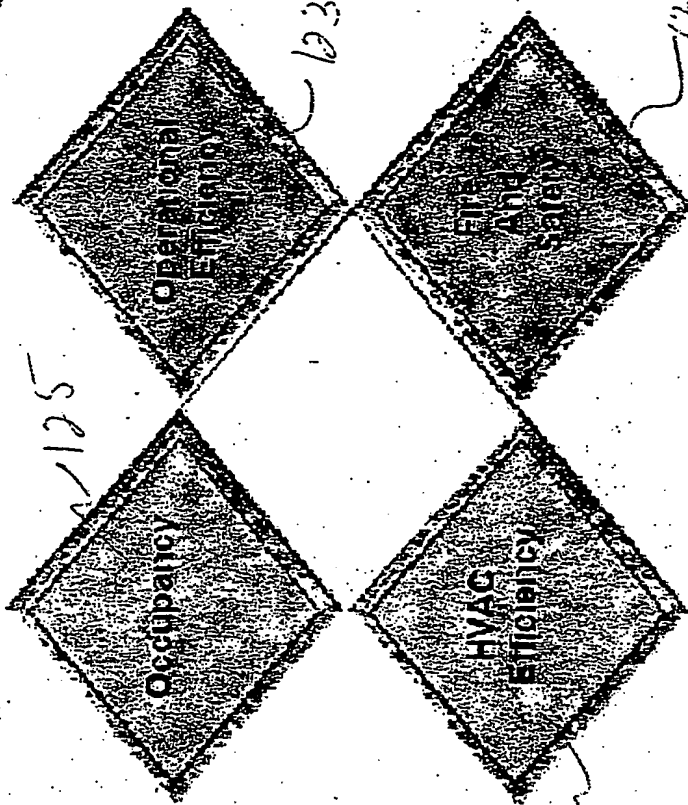
OIL

NATURAL GAS

WATER

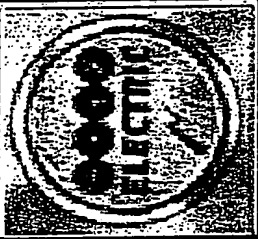
STEAM

Facilities Network



1-17-06 4

Real Time Electric Consumption and Energy Cost Analysis For Distribution Center #0



Provider: 0

Price per Kwh = 0

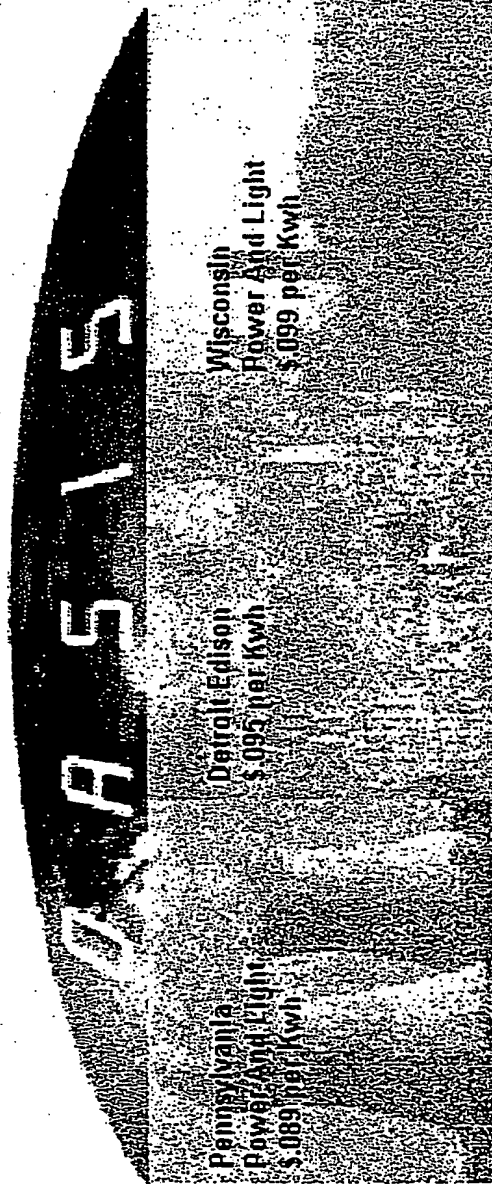
Total Consumption Today

\$44.55 for 469 Kw

Price Off Peak Kwh = .07 cents...\$275

Price On Peak Kwh = .09 cents...\$575

Demand Penalty = \$100.00

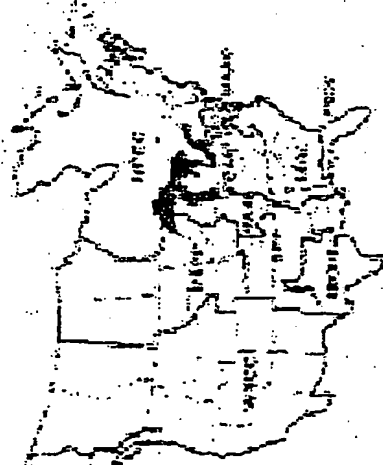


11
2-151

Figure 5

RETURN

OASIS Nodes in MAAC



Node:
PJM OASIS

<http://oasis.pjm.com>

PJM OASIS	
Node	Node Name
W1	W1
W2	W2
W3	W3
W4	W4
W5	W5
W6	W6
W7	W7
W8	W8
W9	W9
W10	W10
W11	W11
W12	W12
W13	W13
W14	W14
W15	W15
W16	W16
W17	W17
W18	W18
W19	W19
W20	W20
W21	W21
W22	W22
W23	W23
W24	W24
W25	W25
W26	W26
W27	W27
W28	W28
W29	W29
W30	W30
W31	W31
W32	W32
W33	W33
W34	W34
W35	W35
W36	W36
W37	W37
W38	W38
W39	W39
W40	W40
W41	W41
W42	W42
W43	W43
W44	W44
W45	W45
W46	W46
W47	W47
W48	W48
W49	W49
W50	W50
W51	W51
W52	W52
W53	W53
W54	W54
W55	W55
W56	W56
W57	W57
W58	W58
W59	W59
W60	W60
W61	W61
W62	W62
W63	W63
W64	W64
W65	W65
W66	W66
W67	W67
W68	W68
W69	W69
W70	W70
W71	W71
W72	W72
W73	W73
W74	W74
W75	W75
W76	W76
W77	W77
W78	W78
W79	W79
W80	W80
W81	W81
W82	W82
W83	W83
W84	W84
W85	W85
W86	W86
W87	W87
W88	W88
W89	W89
W90	W90
W91	W91
W92	W92
W93	W93
W94	W94
W95	W95
W96	W96
W97	W97
W98	W98
W99	W99
W100	W100

2161

Figure 6

Occupancy

RETURN

OUTSIDE INFORMATION

Of People Who Passed The Front Door/Gate

236

Approximate Time That These People Walked By

EX 4M to 10:30 AM	24	3:30 PM to 5:00 PM	144
10:30 AM to 1:00 PM	11	5:00 PM to 7:30 PM	25
1:00 PM to 3:30 PM	56	7:30 PM to 11:00 PM	179

INSIDE INFORMATION

Of People Who Entered The Front Door/Gate

Section A 21 Section D 16
Section B 34 Section E 22
Section C 27 Section F 31

Approximate Time That These People Entered

EX 4M to 10:30 AM	10	3:30 PM to 5:00 PM	29
10:30 AM to 1:00 PM	24	5:00 PM to 7:30 PM	13
1:00 PM to 3:30 PM	15	7:30 PM to 11:00 PM	88

Figure 7

Freehold Central Office

Total Facility Real Time Consumption

6138 Kw

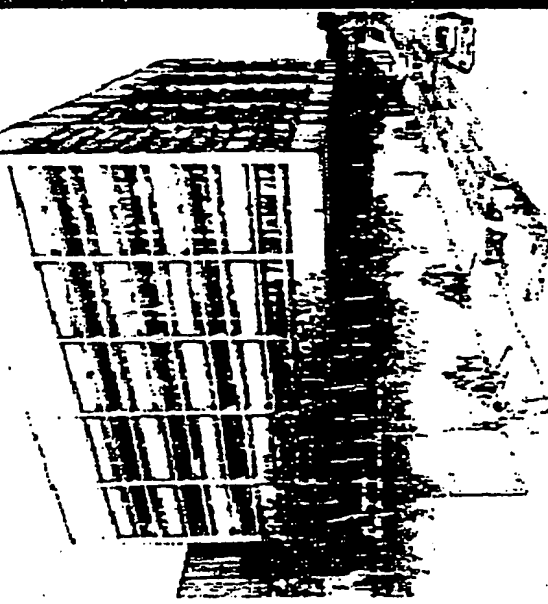
Active Kw	354	Daily Kw/h	1963
Load Interval	462	Yesterday Kw/h	9804
Daily Peak Kw	592	Monthly Kw/h	17635
Monthly Peak	542	Yearly Kw/h	180387

Other Utilities Real Time Consumption

Gas Consumption	614 ccf
Steam Consumption	610 %/h
Steam Demand	457 Mlb
Oil Consumption	108 Gal.
Daily Water Consumption	9687 Gal.
Outdoor Temperature	78 °
Indoor Temperature	72 °
Outdoor Humidity	60 %

NET

Freehold Central Office Floor Selector



- Floor 6
- Floor 5
- Floor 4
- Floor 3
- Floor 2
- Floor 1
- Sublevel 1
- Sublevel 2
- Basement

Floor Plan Selector

RETURN

Figure 8

Freehold Central Office

Total Facility Real Time Consumption

6136 Kw

Active Kw	352	Daily Kwh	1961
Last Interval	460	Yesterday Kwh	3802
Daily Peak Kw	590	Monthly Kwh	17633
Monthly Peak	640	Yearly Kwh	580385

Other Utilities Real Time Consumption

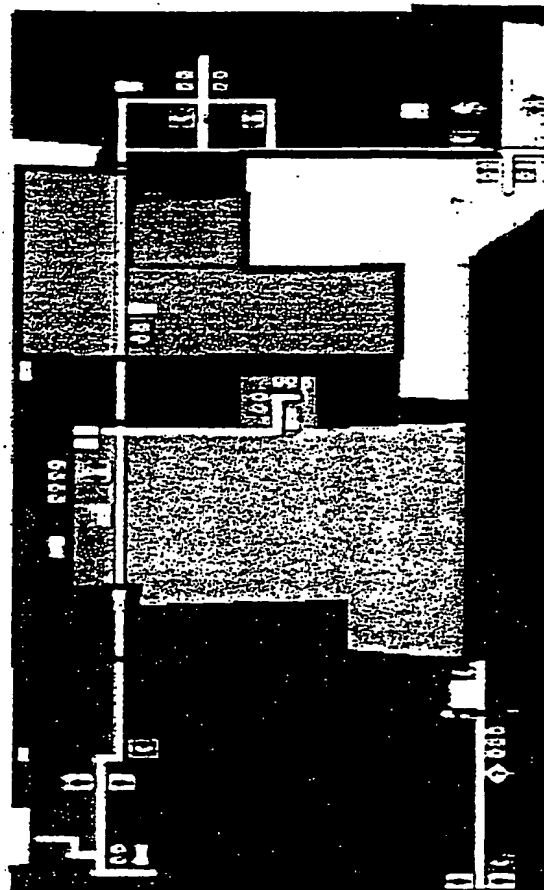
Gas Consumption	612	ccf
Steam Consumption	608	%mlb
Steam Demand	455	MLB
Oil Consumption	106	Gal.
Daily Water Consumption	9685	Gal.

Outdoor Temperature	76	°
Indoor Temperature	72	°
Outdoor Humidity	60	%

ONNET

Freehold Central Office

Hall Selector Fourth Floor



Click Here To Select Florence Hall

Figure 9

Freehold Central Office

Total Facility Real Time Consumption

Active Kw	355	Daily Kwh	1964
Last Interval	463	Yesterday Kwh	3805
Daily Peak Kw	593	Monthly Kwh	17636
Monthly Peak	643	Yearly Kwh	580388

Other Utilities Real Time Consumption

Gas Consumption	615	ccf
Steam Consumption	611	%mlb
Steam Demand	458	MLB
Oil Consumption	109	Gal.
Daily Water Consumption	9688	Gal.

Outdoor Temperature	79	°
Indoor Temperature	72	°
Outdoor Humidity	60	%

ONNET

Freehold Central Room Selector For Lothar Hall Fourth Floor

Stairs

Pat ent Room # 401	Pat ent Room # 403	Pat ent Room # 405	Elevators	Pat ent Room # 407	Pat ent Room # 409	Pat ent Room # 411
Side A			Nurse's Station	Side B		
Pat ent Room # 402	Pat ent Room # 404	Pat ent Room # 406		Pat ent Room # 408	Pat ent Room # 410	Pat ent Room # 412
Pat ent Room # 413	Pat ent Room # 415	Pat ent Room # 417	Elevators	Pat ent Room # 419	Pat ent Room # 421	Pat ent Room # 423
Side A			Nurse's Station	Side B		
Pat ent Room # 414	Pat ent Room # 416	Pat ent Room # 418	Nurse's Locker Room	Pat ent Room # 420	Pat ent Room # 422	Pat ent Room # 424

RENEW

Figure 10

Freehold Central Office

Total Facility Real Time Consumption

6136 Kw

Active Kw	354	Daily Kwh	4963
Last Interval	462	Yesterday Kwh	9804
Daily Peak Kw	592	Monthly Kwh	17635
Monthly Peak	642	Yearly Kwh	380387

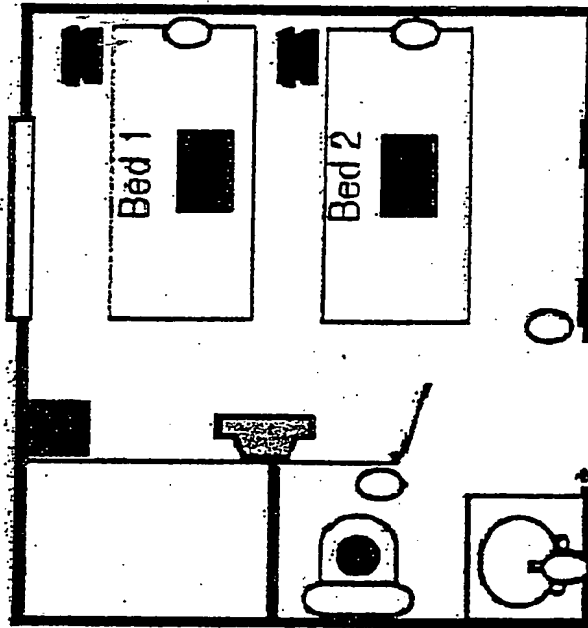
Other Utilities Real Time Consumption

Gas Consumption	634 ccf
Steam Consumption	610 %mlb
Steam Demand	457 MLB
Oil Consumption	108 Gal.
Daily Water Consumption	9687 Gal.

Outdoor Temperature	78 °
Indoor Temperature	72 °
Outdoor Humidity	60 %

ONNET

Room 401

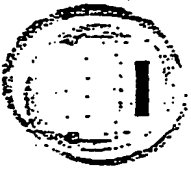


Lighting
Heating & AC
Phones
TV
Vents

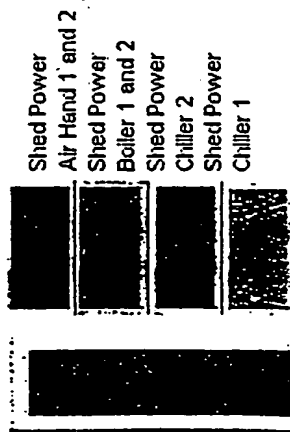
RETURN

251
Actual Room Service for

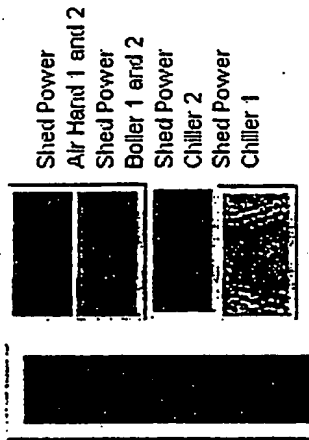
Figure 11



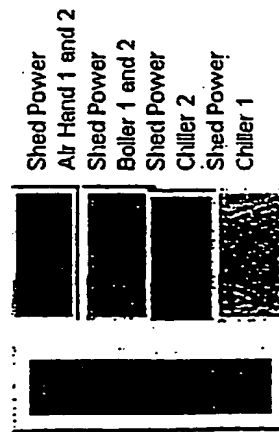
HVAC Load #1



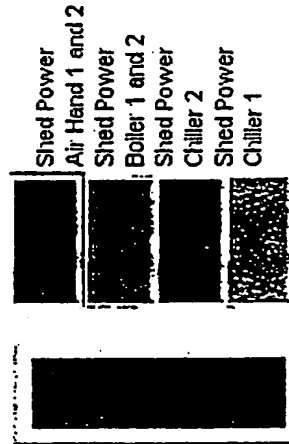
HVAC Load #2



HVAC Load #3



HVAC Load #4



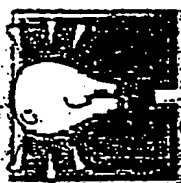
5-2711

Fig. 12

2871

HVAC Efficiency

RETURN



LIGHTING

Present
Load

??KW
Demand



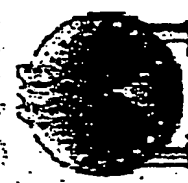
AHU



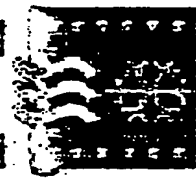
BACK UP GENERATION



DOMESTIC HEATING



BUILDING HEAT



CHILLER



??KW



??KW



??Gal

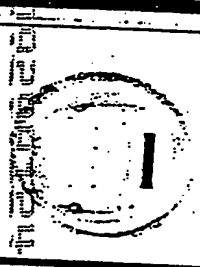


??Mlbs

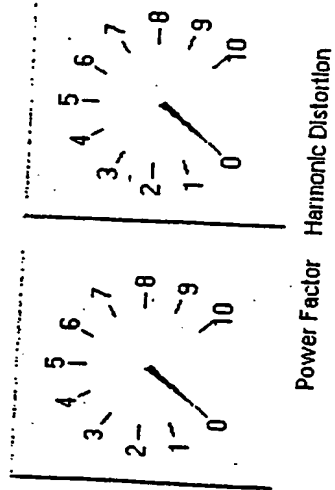
Figure 13

Power Quality Control For 0

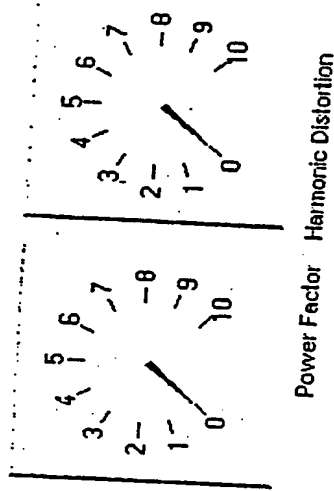
0000000000



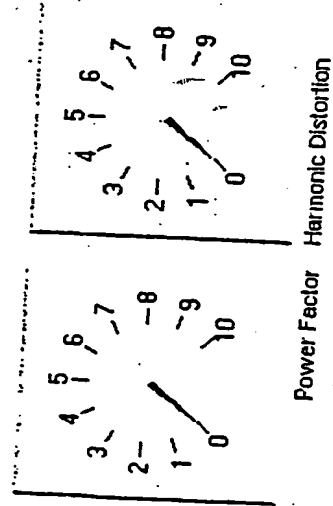
HVAC Load #1



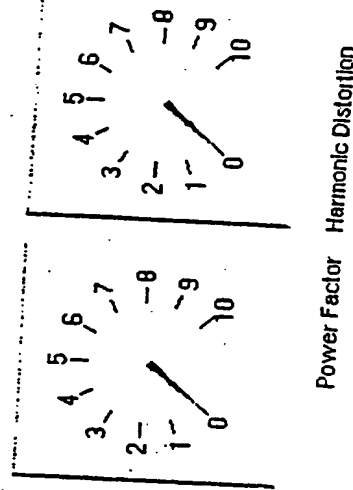
HVAC Load #2



HVAC Load #3



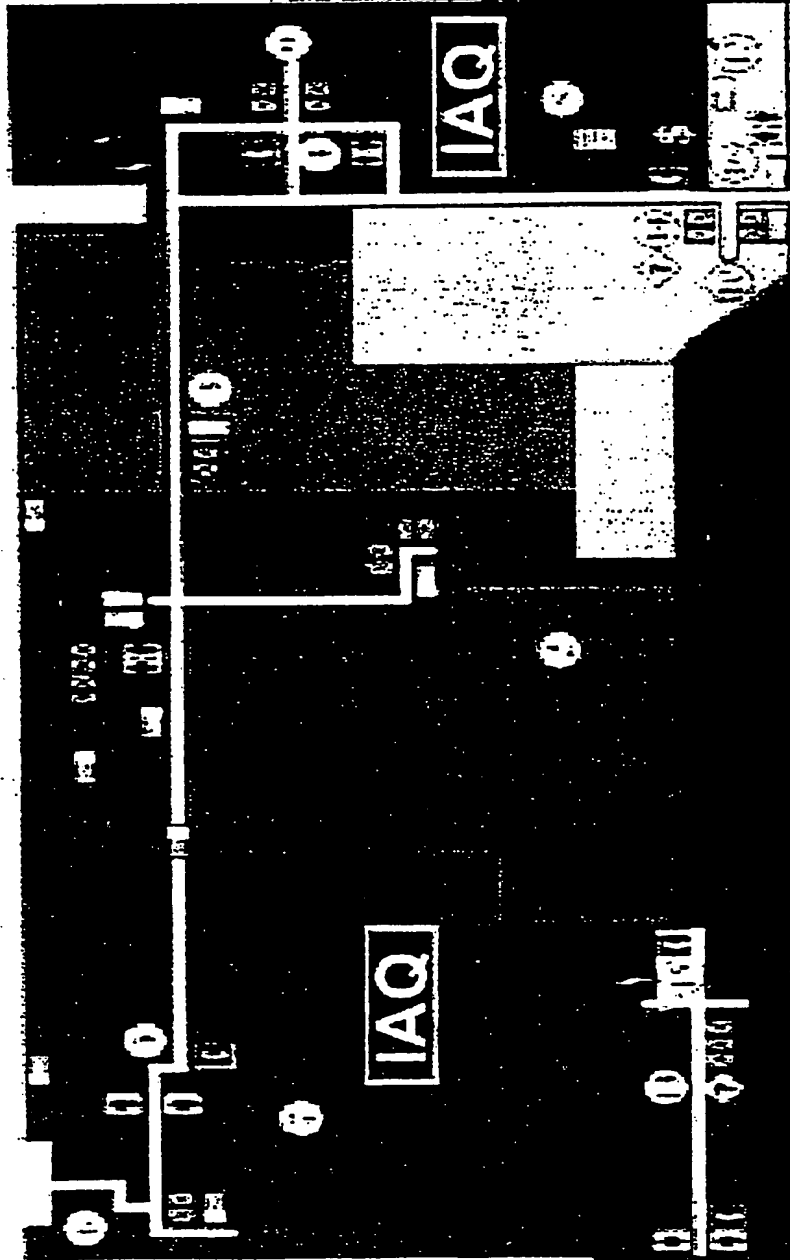
HVAC Load #4



-311

Figure 14

Indoor Air Quality Room Selector For 0, Fourth Floor



Please Select A Room

RETURN

321

Figure 13



Indoor Air Quality

RETURN

	Level Detected	Acceptable
SO ₂ - Sulfur Dioxide =	0.2 ppm	0.14 ppm
H ₂ S	0 ppm	0.14 ppm
CO - Carbon Dioxide	1500 ppm	1000 ppm
CO - Carbon Monoxide	1 ppm	2.5 ppm
NO - Nitrous Oxide	37.2 ppm	0.4 p pm
NO ₂ - Nitrogen Dioxide	0.7 ppm	0.3 ppm
VOCs - Volatile Organic Compounds	High	Medium
RH - Relative Humidity	44% - 58.4%	
Temp -		

331
Figure 16

LOCATION
OF
MULTIPLE
LOCATIONS

~361

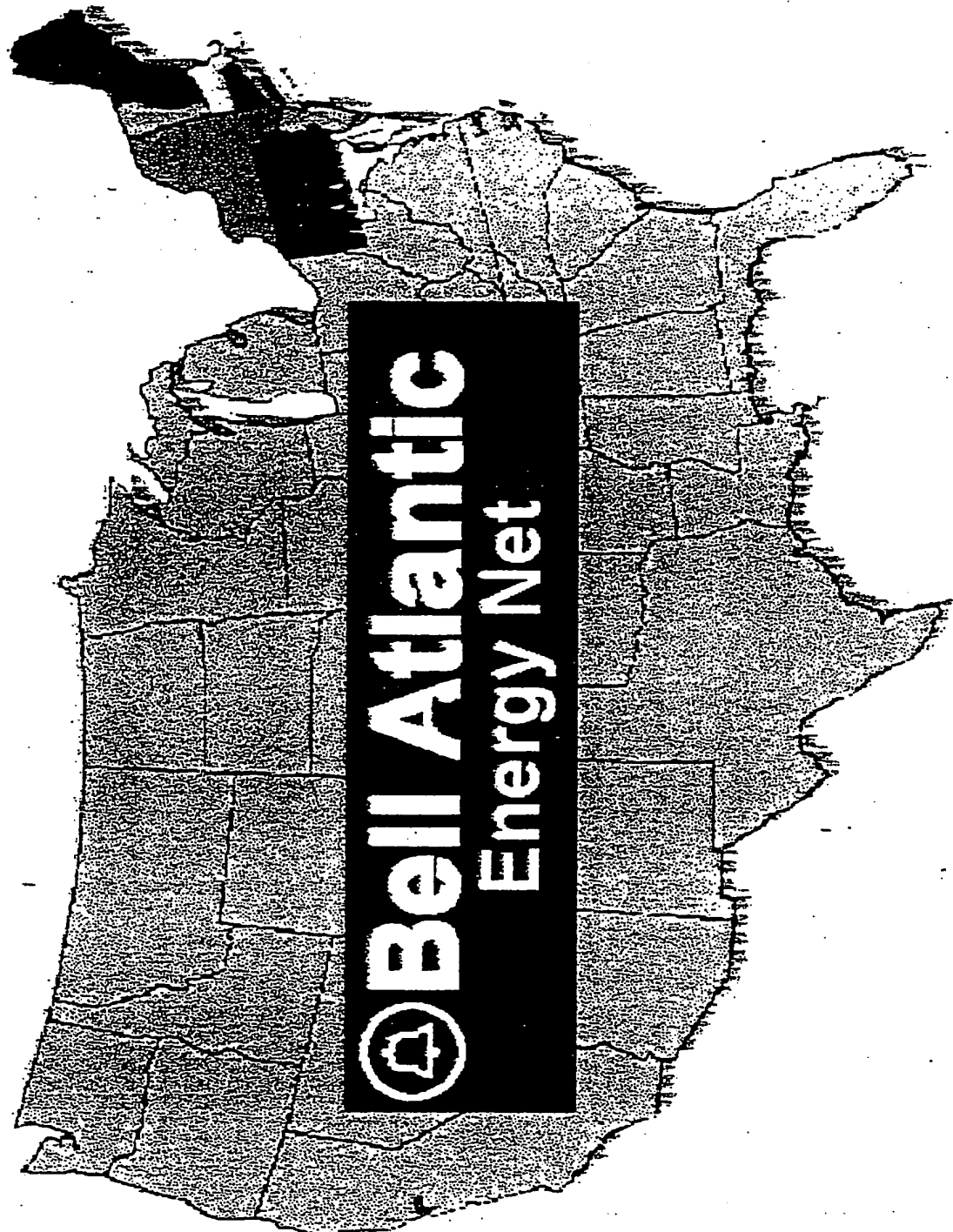


Figure ~~10~~ 17

Bell Atlantic North East Energy Net

Click Mouse To View New
York Map

LOCATION
MAPS

~371

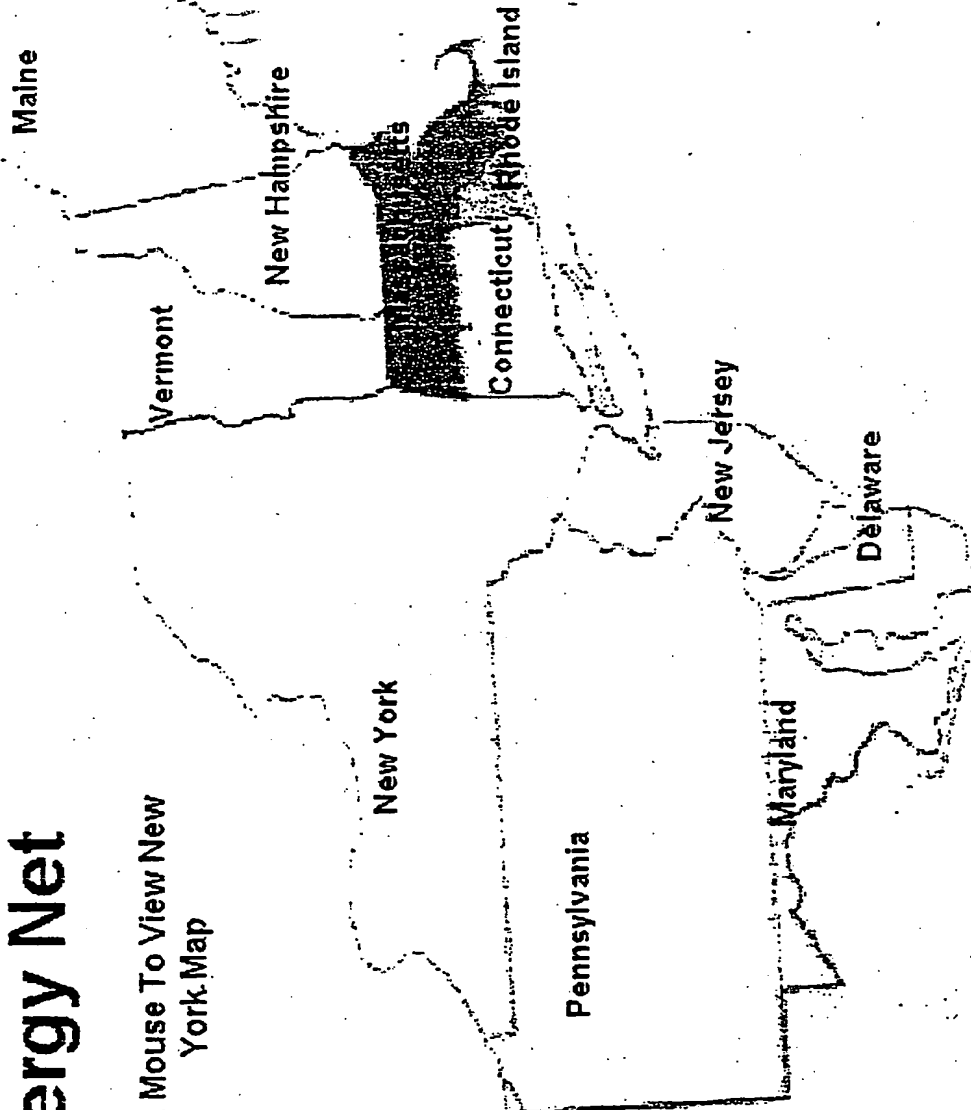


Figure 18

PWB-18A

LOCATION
MAP.

2381

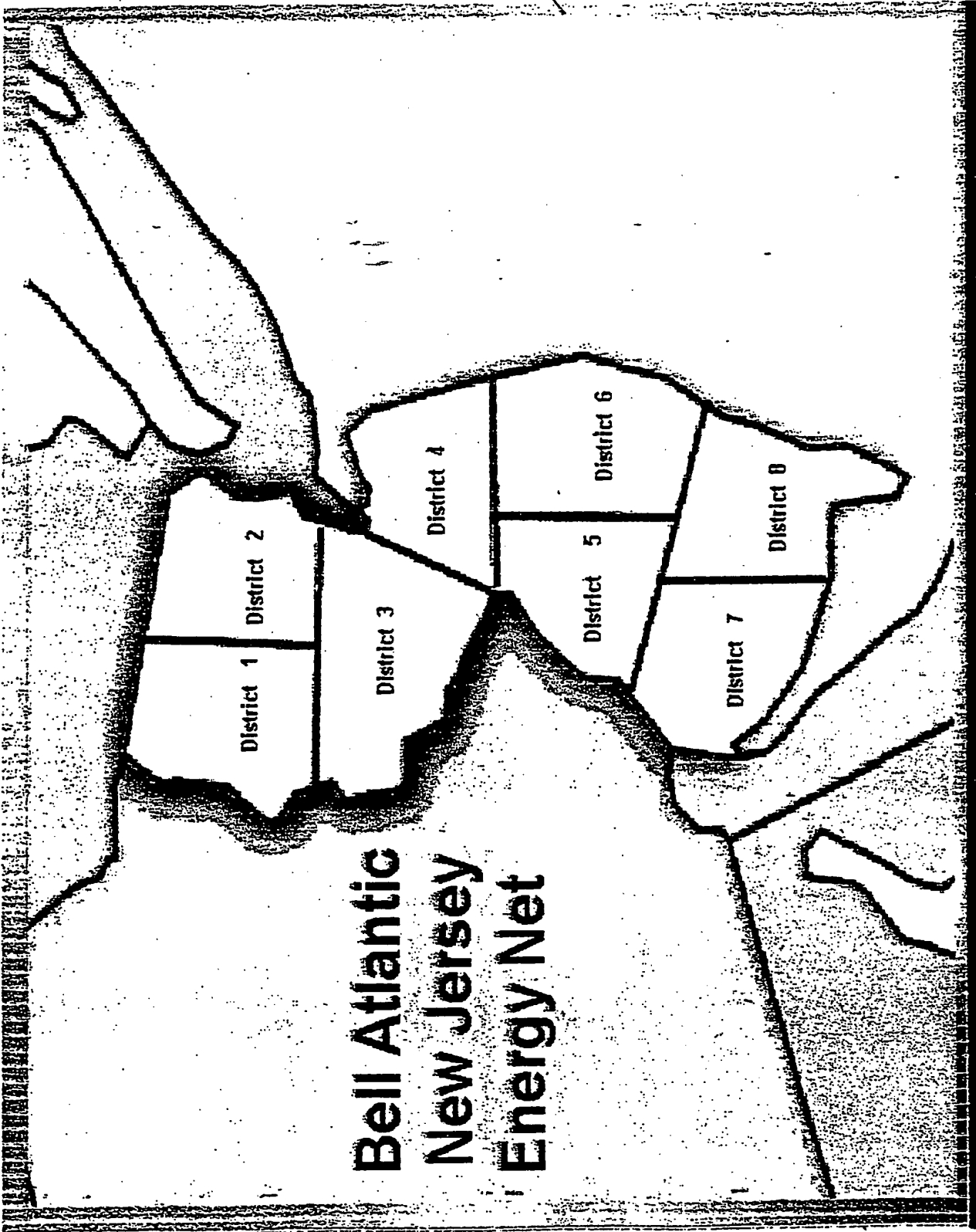
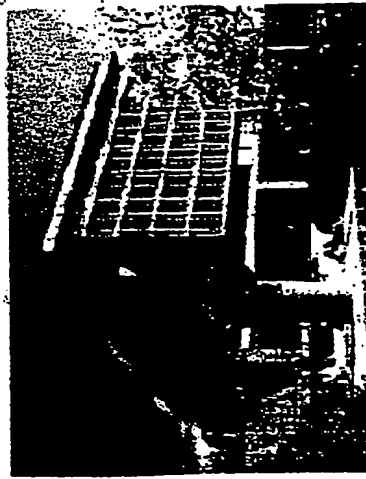


Figure 19

New Jersey Energy Net District 4

Perth Amboy
 Kearsbey
 Sayresville
 Griggstown
 Deans
 Plainsboro
 Lincoln
 Freehold
 Adelphia
 Clarksburg
 Roosevelt
 Yardsville
 Trenton
 Pennington
 Princeton
 Hopewell
 Flemington
 Somerville
 Point Pleasant
 Keyport
 Milltown
 Long Branch
 Aabury Park



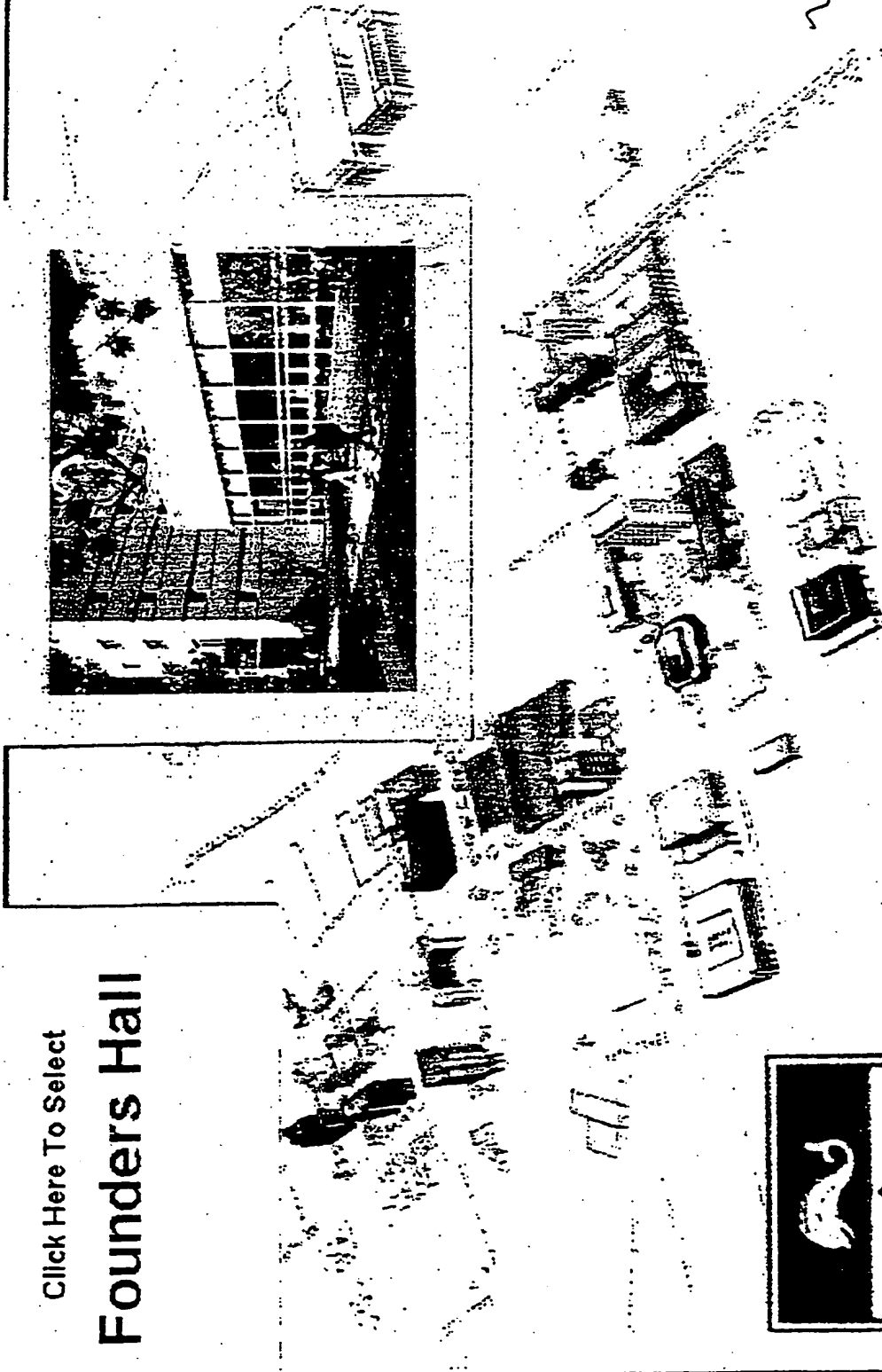
LOCATION
 MAP
 BUILDING
 SITE

~351

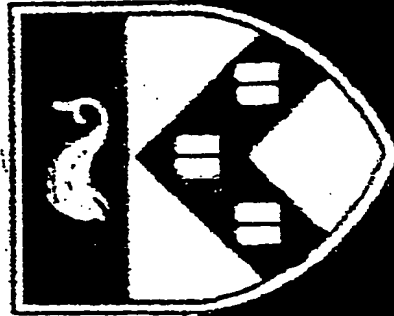
Figure 20

Click Here To Select

Founders Hall



LOCATION
OF
BUILDING
FOR
CAMPUS
UNIVERSITY
HOSPITAL
LOCATION



Saint Patrick's Health Complex


~401

Figure 21

PWB-118A


System Operation

Multiple Energy Providers



Electric Usage Data

Sales Productivity Input



Remote Mini-Link Server

Omni-link® Graphical Interface

Energy Procurement Network

Operational Efficiency Network

Demand Efficiency Network

HVAC Response Network


Occupancy Network

Personnel Paging Network


Indoor Air Quality Network

Security Network

Demand Side Operations



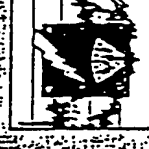
HVAC Control System




Lighting System Data

Local Mini-Link Server

Supply Side Operations



Electric Usage Data



Gas Usage Data

Facility Location (Physical Sensors)

Temperature Sensor

Motion Sensor

Power Consumption

Pressure Sensor

Lumen Light Level

Time

Air Characteristics

Oxygen

Carbon Monoxide

Carbon Di-oxide

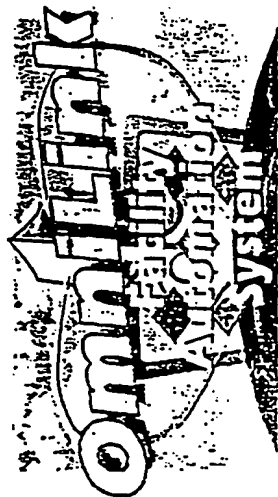
Hydrogen Sulfide

Nitric Oxide

Hydrogen Sulfide

Humidity

Organic Compounds



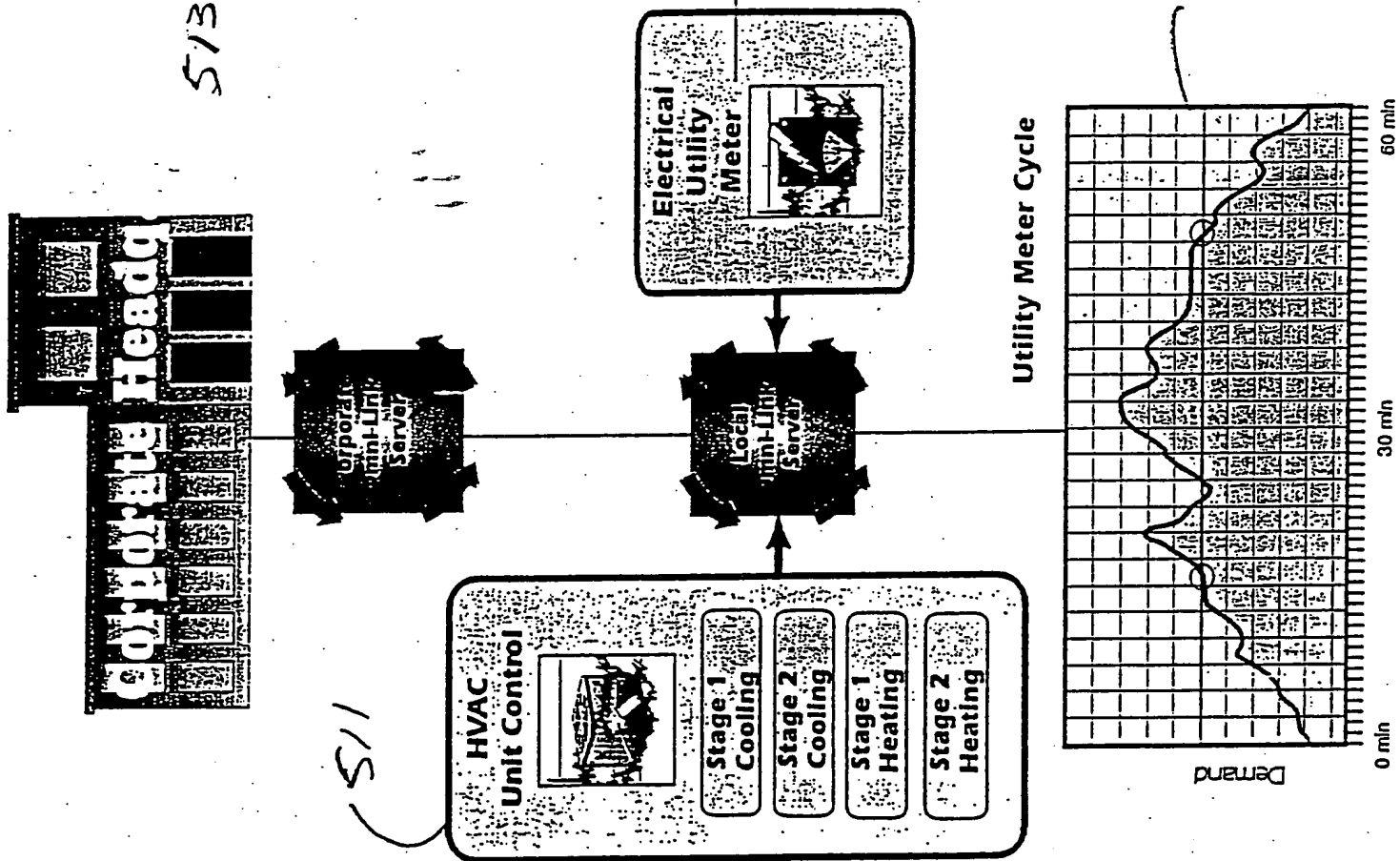
Demand Efficiency Network

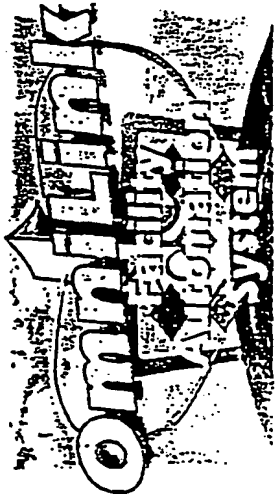
Net Benefits:

- Centralized demand control
- Localized demand control
- Utility procurement demand control
- Corporate demand profiling
- Pinpoint problem areas

Net Savings:

- Conservatively a 3 - 10% reduction in electrical demand





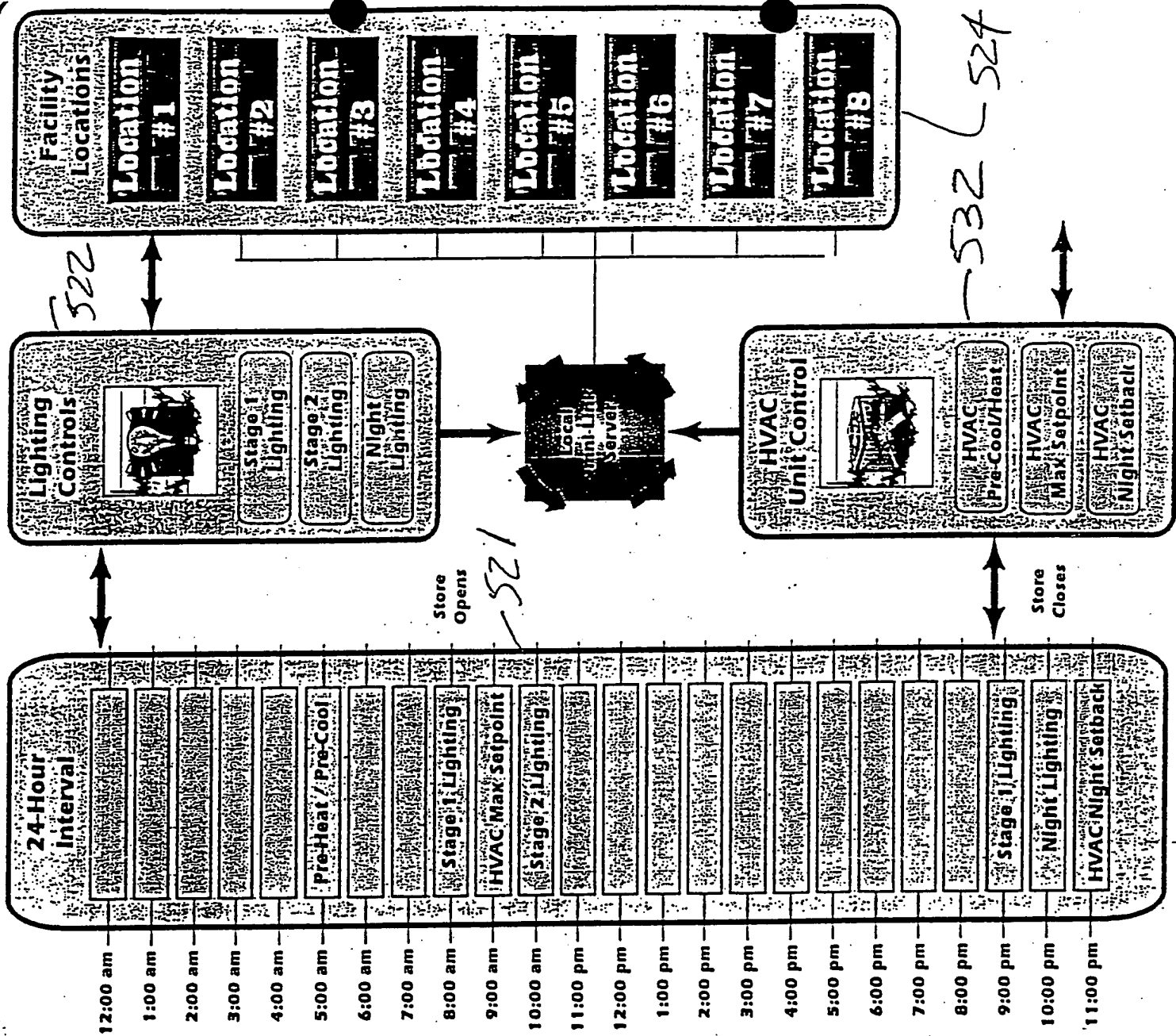
Operational Efficiency Network

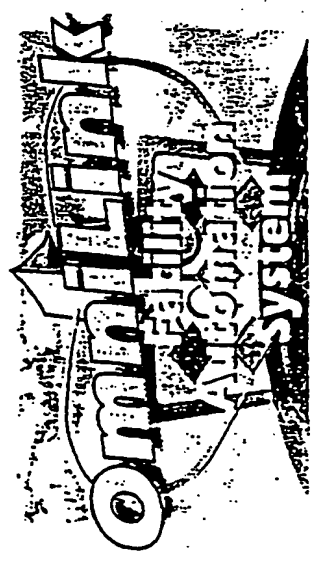
Net Benefits:

- Nationwide Simultaneous Operational Control
- Efficient Operations of HVAC & Lighting
- Timedclock efficiency without Human Intervention
- Automatic Space Pre-Heat / Pre-Cool
- Automatic Multi-Stage Lighting

Net Savings:

- Conservatively 5 - 15% Reduction in Energy Consumption





Energy Procurement Network

Net Benefits:

- Centralized Procurement Network
- Low cost electricity
- Instant consolidation
- Instant aggregation
- Grid purchase / no middleman

Net Savings:

- Approximately 10% less than the deregulated price
- Approximate savings 2 to 5 mills

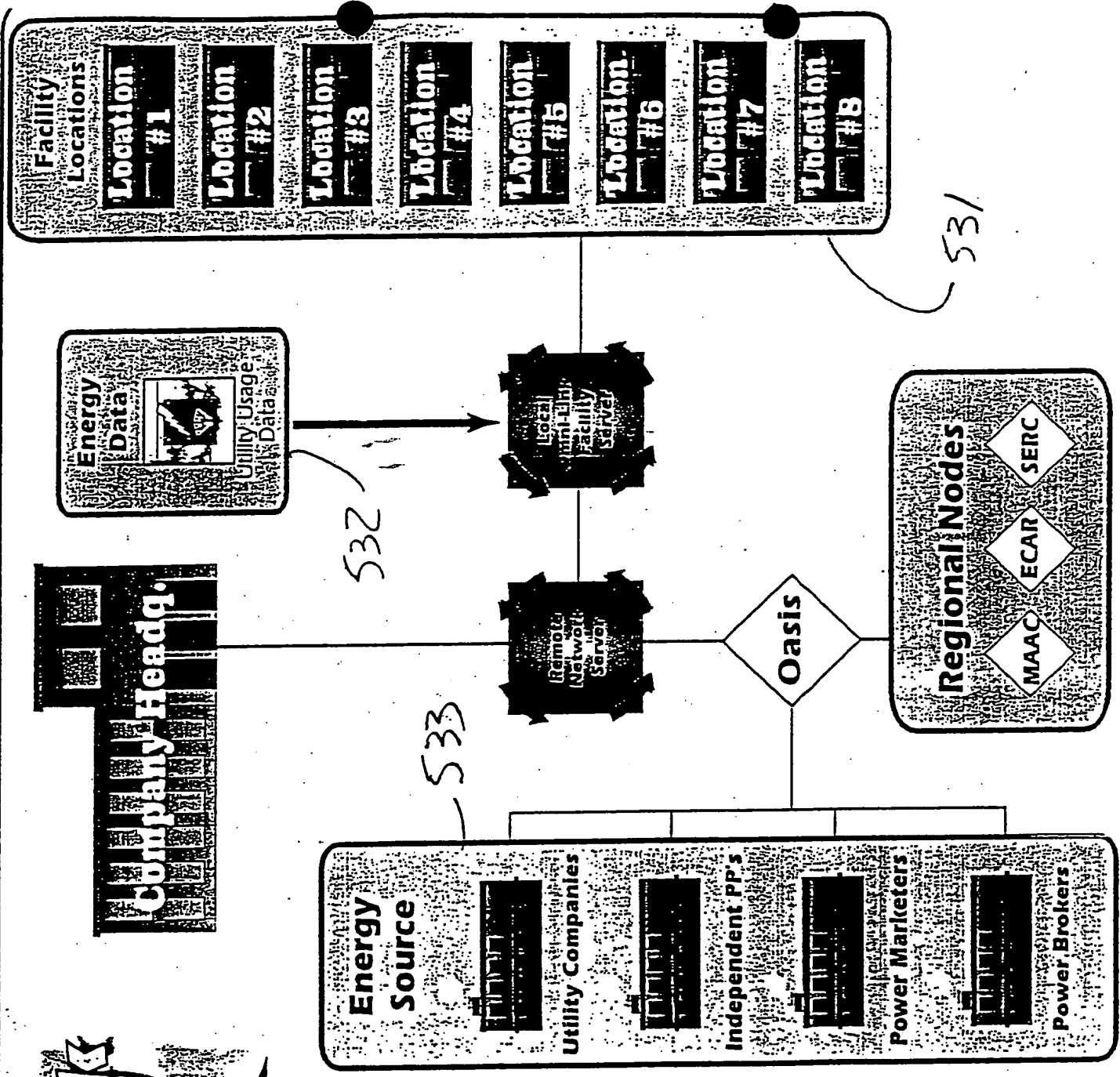


FIGURE 26



Occupancy Network

Personnel Paging Network

Net Benefits:

- Instant store occupancy Information
- Instant mail occupancy Information
- Instant traffic direction
- Staff requirements / statistical analysis

Net Savings:

- Labor operational control
- Statistical sales analysis
- Coordination link with demand module

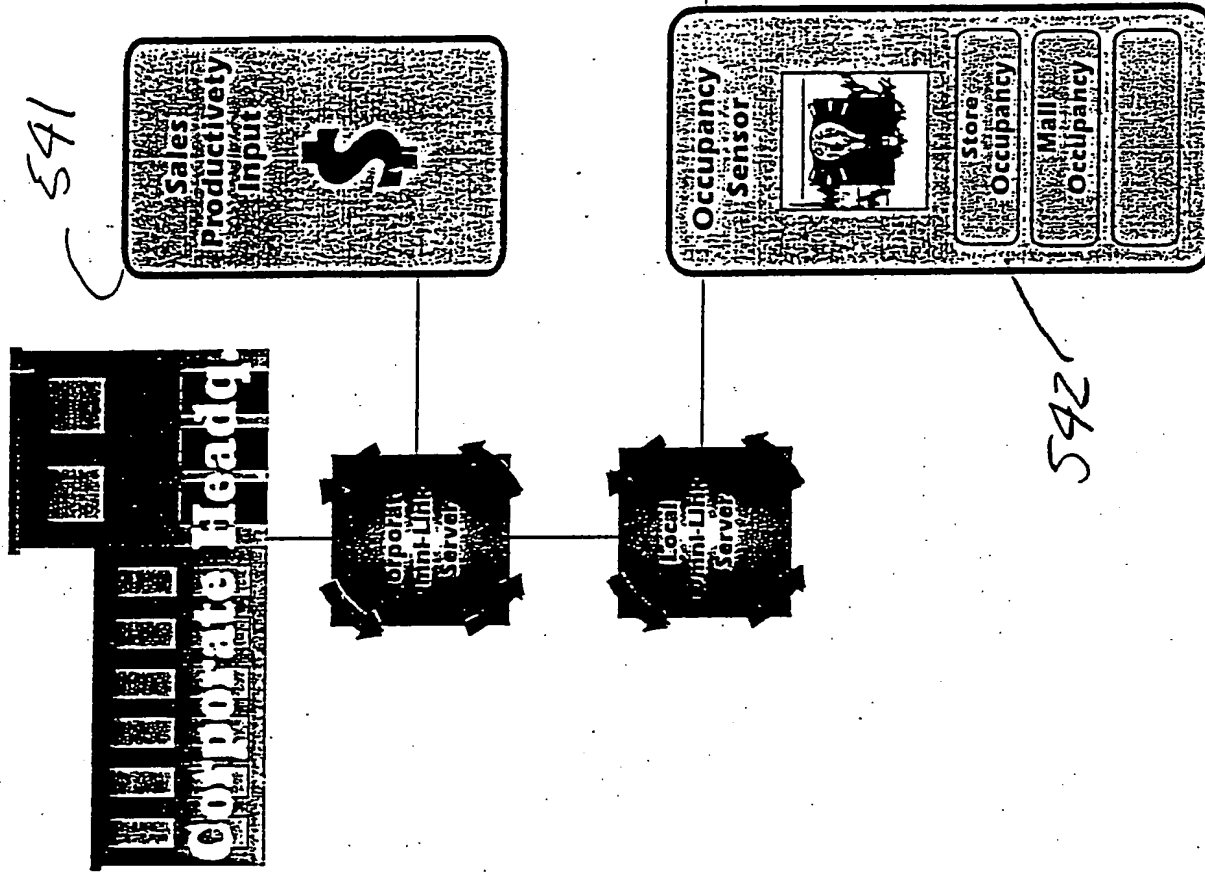
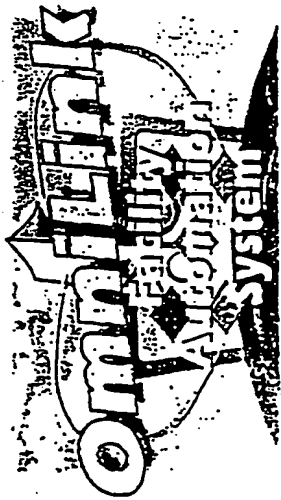


FIGURE 27



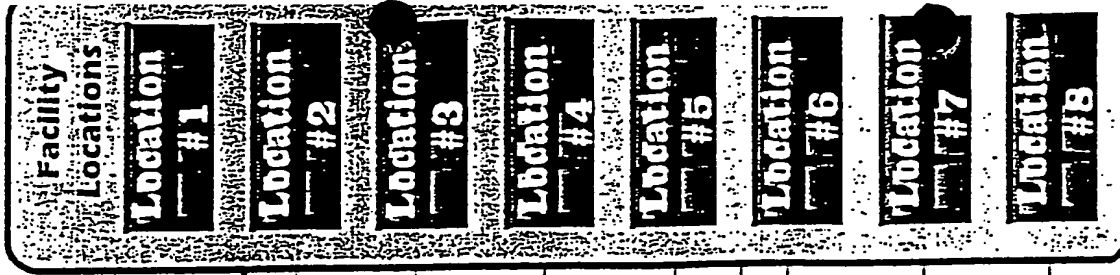
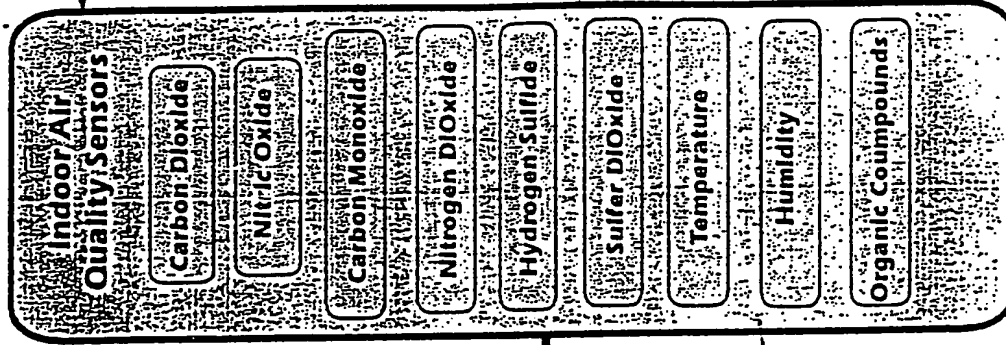
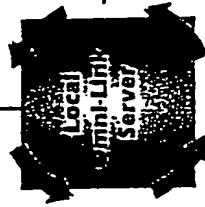
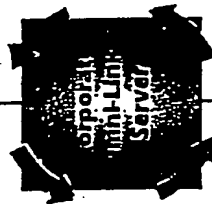
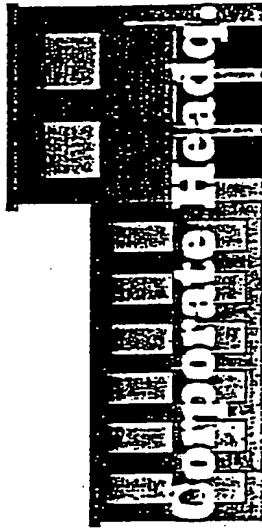
Indoor Air Quality Network

Net Benefits:

- Instant health information for employees

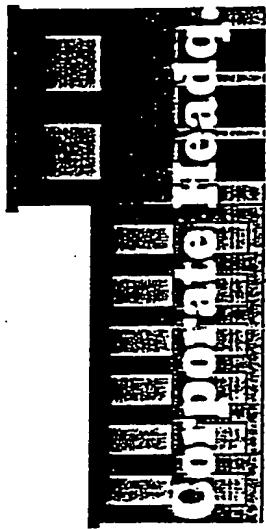
Net Savings:

- Less Sick Employees
- Less claims for poor air



SS1

SS2



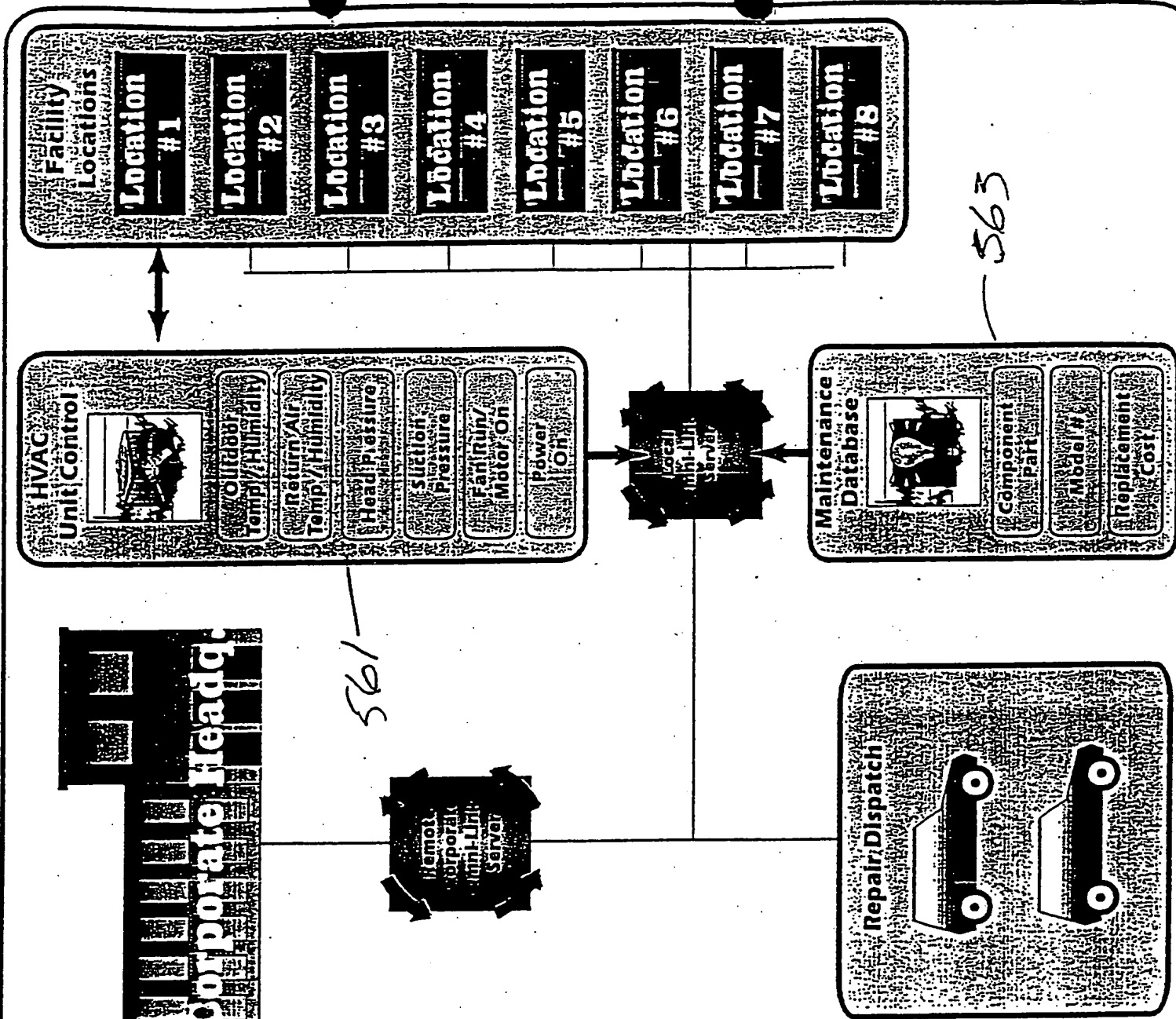
HVAC Response Network

Net Benefits:

- Centralized processing for all HVAC service
- Low-priced proactive repair rather than costly reactive service (40%)
- Cost-effective dispatch identifying component malfunction
- Alleviation of false dispatches (30%)
- Track repair cost, repair time, contractor performance, repeated billings
- Embedded program / contractor training

Net Savings:

- Approximately 80% reduction in false dispatch calls
- Approximately 80% reduction in overtime weekend repairs
- Conservatively a 5 - 15% reduction in



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